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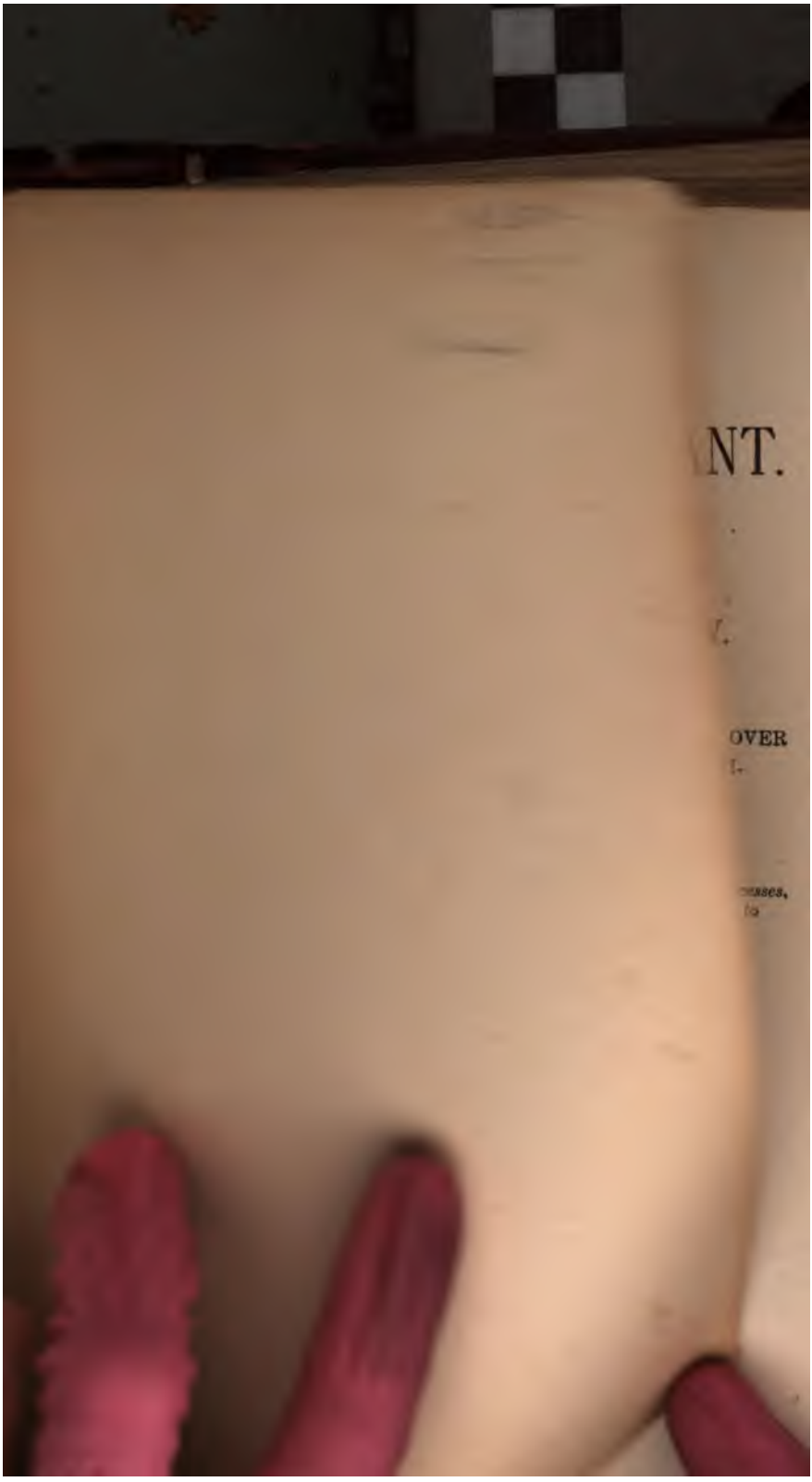

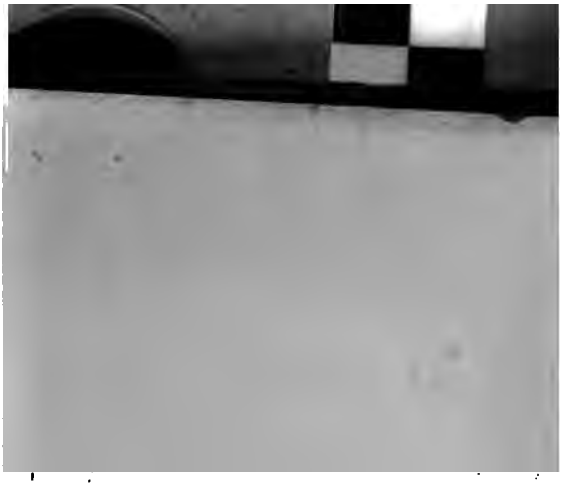

Louisa Rawle -

THE UNIVERSAL

HOUSEHOLD ASSISTANT.

A CYCLOPEDIA OF

WHAT EVERY ONE SHOULD KNOW.

COMPLETE DIRECTIONS FOR MAKING AND DOING OVER FIVE THOUSAND THINGS NECESSARY IN BUSINESS, THE TRADES, THE SHOP, THE HOME, THE FARM, AND THE KITCHEN.

Comprising Recipes, Prescriptions, Medicines, Manufacturing Processes, Trade Secrets, Chemical Preparations, Mechanical Appliances, Aid to Injured, Antidotes, Business Information, Every-Day Law, Home Decoration, Art Work, Fancy Work, Agriculture, Fruit Culture, Stock Raising, and hundreds of other useful hints and helps.

GATHERED FROM THE MOST RELIABLE SOURCES.

COMPILED AND ARRANGED

BY S. H. BURT.

NEW YORK:

A. L. BURT, PUBLISHER.

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PREFACE.

"What every one should know" are those practical, handy ways of doing, making and mending all sorts and kinds of things, ignorance of which necessitates so much extra labor, trouble, anxiety and expense.

In the common daily experience of every one there are hundreds of occasions when a knowledge of "how to do" would add largely to the success, comfort or safety of life. There are emergencies constantly arising, both in the ordinary course of business and trade, and through the occurrence of accidents, that require instant attention, or the results will be most disastrous. There are innumerable instances where a practical knowledge of the elements of Medicine and Surgery would be of incalculable benefit in preserving life. The comfort, luxury and beauty of the household can be largely increased by a little study of the means of repairing our posessions.

It is to supply much needed information on these and other common but essential topics that this book has been made. It has been the intention of the compiler to gather into this volume all those practical rules, recipes and hints which are capable of being followed and applied by any one without high-priced professional advice or instruction; to show the way of doing things oneself without unnecessary delay, labor or expense; to gather much that has existed in the general experience of men and women, but which has never been classified, and to present this mass of information in a handy form so that it may be easy of access whenever the constantly recurring occasions demand.

A list of the contents of this book would include all the simple recipes, prescriptions and medicines, their composition, uses and effects, which a family employs; it would contain descriptions of all the manufacturing processess, the trade secrets, the chemical and

mechanical agents, etc., that should form a part of the industrial equipment of every artisan and mechanic; it would contain business, law, and mercantile information by means of which the trades are conducted; it would contain complete directions for doing all those common things that daily perplex housekeepers all over the land; it would contain many hints and directions of value to the farmer, relating to the culture of the land, the growing of crops and fruits, the rearing of live stock, etc.; it would contain directions for mastering those branches of art work that are occupying so much attention at present; it would contain rules for conduct in all sorts of emergencies, from the poisoning of a human being to the breaking of a chair leg, from a catalogue of antidotes to the recipe for making a furniture varnish.

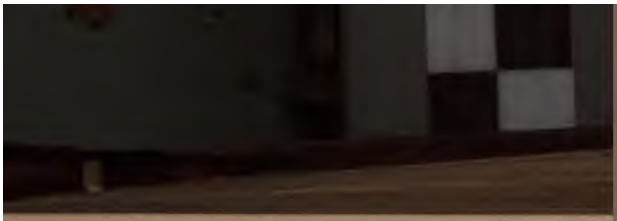
All these things, and many more, this book contains. The alphabetical arrangement of subjects has been selected as the most convenient for reference. From hundreds of reliable sources the articles have been selected, and no thing has been admitted which has not the sanction of usage and worth.

Some of the information between these covers will not be unfamiliar to each reader, but what new hints and helps are gleaned will repay one fifty times the cost; and as people cannot always remember what they *do* know when it is most necessary, this little mentor and guide should always be at hand, ready to give you its aid.

In presenting this book to the Public, the compiler feels assured that its usefulness and novelty will be an immediate passport to favor, and that its worth will bring it lasting popularity.

S. H. B.

NEW YORK, 1884.



WHAT EVERY ONE SHOULD KNOW.

A Cyclopedia of Practical Information.

Abscess.—In some particulars an abscess resembles a large boil. There is an inflammatory condition, with heat, pain, and swelling. The result of this inflammation is the discharge of degenerated matter or pus. They may be opened as soon as pulsation is detected, the same as boils, or the operation may be delayed until by using hot water compresses, flax seed poultice, bread and hot milk poultice, they come to a point or head. The matter or pus should be completely discharged by gentle pressure, and the cavity freely washed out by injecting a mixture of one part carbolic acid and twenty of warm water, and pressure exerted by a bandage, when healing will rapidly take place.

Acid—(Strawberry).—Take three pounds of ripe strawberries, two ounces of citric acid, and one quart of spring water. Dissolve the acid in the water, and pour it on the strawberries, and let them stand in a cool place twenty-four hours. Then drain the liquid off, and pour it on three more pounds of fruit; let it stand twenty-four hours. Add to the liquid its own weight of sugar; boil it three or four minutes in a porcelain-lined preserve kettle, lest metal may affect the taste, and, when cool, cork it in bottles lightly for three days, then tightly, and seal them. Keep in a dry and cool place. It is delicious for sick and well.

Aconite Liniment.—Tincture of aconite root, tincture of arnica flowers, laudanum in equal parts. Mix thoroughly; a very useful liniment.

Aconite—poisoning by.—This root has been sometimes swallowed for horseradish. The symptoms of poisoning by this means, or by an overdose are tingling and numbness of the tongue, throat, and limbs, pain in the stomach, vomiting, purging, feeble pulse, labored breathing, and great prostration. Give an emetic of sulphate of zinc in water, or three or four spoonfuls of table salt and water. Use an alcoholic stimulant, and in the meantime send for the family physician.

Accidents.—In all recent wounds, the first consideration is to remove foreign bodies, such as pieces of glass, splinters of wood, pieces of stone, earth, or any other substance that may have been introduced by the violence of the act which caused the wound. Where there is much loss of blood, an attempt should be made to stop it with dry lint, compressed above the part wounded, if the blood be of a florid color; and below, if of a dark color. In proportion to the importance of the part wounded, will be the degree of the discharge of blood, and the subsequent tendency to inflammation and its consequences.

Accidents—ways to prevent.—As most sudden deaths come by water, particular caution is therefore necessary in its vicinity.

Stand not near a tree, or any leaden spout, iron gate, or palisade, in time of lightning.

Lay loaded guns in safe places, and never imitate firing a gun in jest.

Never sleep near charcoal; if drowsy at any work where charcoal fires are used, take the fresh air.

Carefully rope trees before they are cut down, that when they fall they may do no injury.

When benumbed with cold beware of sleeping out of doors; rub yourself, if you have it in your power, with snow, and do not hastily approach the fire.

Beware of damp air vaults; let them remain open some time before you enter; or scatter powdered lime in them. Where a lighted candle will not burn, animal life cannot exist; it will be an excellent caution, therefore, before entering damp and confined places, to try this simple experiment.

Never leave saddle or draught horses, while in use, by themselves; nor go immediately behind a led horse, as he is apt to kick.

Be wary of children, whether they are up or in bed; and particularly when they are near the fire, an element with which they are very apt to amuse themselves.

Leave nothing poisonous open or accessible; and never omit to write the word "Poison" in large letters upon it, wherever it may be placed.

In walking the streets keep out of the line of the cellars, and never look one way and walk another.

Never throw pieces of orange-peel, or broken glass bottles into the streets.

Never meddle with gunpowder by candle light.

In opening effervescing drinks, such as soda water, hold the cork in your hand.

Quit your house with care on a frosty morning.

Have your horses' shoes sharpened when there are indications of frost.

In trimming a lamp with naphtha, never fill it. Leave space for the spirit to expand with warmth.

Never quit a room leaving the poker in the fire.

When the brass rod of the stair carpet becomes loose, fasten it immediately.

Keep lucifer matches in their cases, and never let them be strewed about.

Acid Drops.—Pound and sift into a clean pan eight ounces of double refined sugar, add slowly as much water as will render the sugar sufficiently moist not to stick to the stirring spoon, place the pan on a small stove or slow fire, and stir till it nearly boils, remove from the fire and stir in one and one-fourth ounces tartaric acid. Place it on the fire for half a minute, then dip out small quantities from the pan, and let it fall in small drops on a clean tin plate; remove the drops in two hours with a knife.

Acid Stomach.—A little magnesia and water will sometimes correct the acidity of a child's stomach, and render unnecessary any stronger medicine. Powder a teaspoonful of magnesia, and put it in half a glass of water; it will not dissolve, of course, but will mix with the water so that an infant can swallow it. Give a teaspoonful of this three times a day until indications warrant you in discontinuing it.

Æolian Harp—to make.—This instrument, when placed in a window in a draft of air, produces the most pleasing music. We here give directions whereby any one may construct one for himself: Length, thirty-two inches by six inches; depth, one and three-quarter inches. The strings are attached to the small hooks at the end, corresponding to the pegs. The strings must be about the thickness of the first string of the violin. These strings answer well, but if too expensive the small gut used by whip manufacturers may be used. The bottom plank of the harp should be oak, three-quarters of an inch thick, length three feet, breadth ten inches. The bridges may be any sonorous wood (but steel will give the best sound), half an inch in height, cut angular to a blunt point. They must not be flattened down, but must be made to fit very flat to the bottom board, or it will jar and never play well. This is the great defect in all harps made by amateurs. The ends of the harps should be oak, one inch thick, and must be fixed very firmly to the bottom board, but not with metal screws or glue; and in these the pins are fixed for tightening the strings. Use fiddle-pins, half at each end. The top should be half an inch thick, and sycamore wood is the best, and may be polished; it should be very slightly fastened on, for it has to be removed every time to tune. Common catgut does nearly as well as German. Get as thick a string as you can for one side, and a thin one for the other; then graduate them from the thick to the thin, so as not to have two alike. They are in general tune to treble C, but it is preferable to tune to low C, and then each string an octave higher. This is easily altered, if desirable. The instruments must be very strong in all respects, for the strings exert almost incredible strength. The position for placing the harp at the window to be with the upper surface inclined towards the draft of air.

Ague Cure.—Cut three lemons into thin slices and pound them

with a mallet, then take enough coffee to make a quart, boil it down to a pint and pour it while quite hot over the lemons. Let it stand till cold, then strain through a cloth, and take the whole at one dose, *immediately after* the chill is over, and *before* the fever comes on.

Ague Pill.—Quinine, twenty grains; Dover's powders, ten grains; subcarbonate of iron, ten grains; mix with mucilage of gum arabic and form into twenty pills. Dose, two each hour, commencing five hours before the chill should set in. Then take one night and morning until all are taken.

Alabaster—to clean.—For cleaning it there is nothing better than soap and water. Stains may be removed by washing with soap and water, then white-washing the stained part, letting it stand some hours, then washing off the white-wash, and rubbing the stained part.

Ale (Ginger).—The Belfast ginger ale may be made as follows: Powered double refined sugar, sixteen ounces; essence of cayenne, four drachms; essence of lemon, forty drops. The soda, acid, and sugar must be carefully dried separately, at a temperature not exceeding one hundred and twenty degrees; and the sugar, before drying, must be thoroughly incorporated with the essences, to which a small quantity of caramel as coloring may be added. This forms a powder, a dessert-spoonful of which will make a tumblerful of the drink.

Ammonia—uses of.—For washing paint, put a tablespoonful of spirits of ammonia in a quart of moderately hot water, dip in a flannel cloth, and with this simply wipe off the wood work; no scrubbing will be necessary.

For taking grease spots from any fabric, use the ammonia nearly pure, then lay white blotting paper over the spot and iron it lightly. In washing laces, put about twelve drops in a pint of warm suds.

To clean silver, mix two teaspoonfuls of ammonia in a quart of hot soap suds, put in your silverware and wash it, using an old nail brush or tooth brush for the purpose.

For cleaning hair brushes, etc., simply shake the brushes up and down in a mixture of one teaspoonful of ammonia to one pint of hot water; when they are cleansed, rinse them in cold water, and stand them in the wind or in a hot place to dry.

For washing finger marks from looking glasses or windows, put a few drops of ammonia on a moist rag, and make quick work of it.

If you wish your house plants to flourish, put a few drops of the spirits in every pint of water used in watering.

A teaspoonful in a basin of cold water adds much to the refreshing effects of a bath.

Nothing is better than ammonia for cleaning the hair. In every case rinse off ammonia with clear water.

Liquid ammonia is the most powerful and useful agent for cleaning silk stuffs and hats, and for neutralizing the effects of acids. In this latter case it is often enough to expose the spots to the vapor of ammonia, which makes them disappear entirely.

Ants—several ways to destroy.—Put red pepper in the places the ants frequent the most, and scrub the shelves or drawers with strong carbolic soap.

A small bag of sulphur kept in a drawer or cupboard, or saucers of olive-tar set where they are, will drive them away.

A string wet in kerosene oil and tied around sugar barrels, lard cans, preserves, etc., is said to keep away ants. The string should be wet with the oil every few days.

Ants may be driven away by putting Scotch snuff wherever they are in the habit of going for food.

A small spray of wormwood if placed on buttery shelves, will, it is said, destroy or drive away ants.

Persons who are troubled with ants in their houses may get rid of them by rubbing the shelves with gum camphor. Two applications will be sufficient, with a week intervening.

A strong solution of carbolic acid and water, poured into holes, kill all the ants it touches, and the survivors immediately take themselves off.

Ants that frequent houses or gardens may be destroyed by taking flour of brimstone half a pound, and potash four ounces; set them in an iron or earthen pan over the fire until dissolved and united; afterwards beat them to a powder, and infuse a little of this powder in water—and wherever you sprinkle it the ants will die or leave the place.

Red ants may be banished from a pantry or store-room by strewing the shelves with a small quantity of cloves, either whole or ground. We use the former, as not being so likely to get in the food placed upon the shelves. The cloves should be renewed occasionally, as after a time they lose their strength and decay.

Antiseptic.—Boracic acid is said to be one of the best antiseptics; one part of a ten per cent. solution added to eight of milk, is said to keep it fresh a week.

Antiseptic.—Dr. Zollner states that carbon disulphide in a state of vapor is capable of acting as a powerful antiseptic. Two drops allowed to evaporate spontaneously in a closed vessel of the ordinary temperature were found to keep meat, fruit, vegetables, and bread in a perfectly fresh condition for several weeks. The articles submitted to the process acquire neither smell nor taste, the carbon disulphide evaporating entirely when they are exposed to the air at the ordinary temperature. The vapor of carbon disulphide being very inflammable, all experiments should be performed during daylight.

Anti-Fat Diet.—For those people whose embonpoint is a matter of solicitude, whether because it is uncomfortable or unfashionable, the following diet is proposed by a doctor: Lean mutton and beef, veal and lamb, soups not thickened, beef-tea and broth; poultry, game, fish, and eggs; bread in moderation; greens, cresses, lettuce, etc.; green peas, cabbage, cauliflower, onions; fresh fruit without sugar.

Apartments—to perfume.—The best and most simple method to diffuse the odor of any perfume throughout an apartment is to make use of a spirit-lamp. Into this lamp put the essence or scent, which should not contain water. Provide the lamp with a thick wick, and place slightly above a small ball of spongy platinum; then light the wick, and when the platinum is red-hot, which will be the case in a few seconds, blow out the flame. The platinum ball will continue in a state of ignition as long as any spirit remains in the bottle, throwing off the perfume and vapor as it arises by means of the wick, and diffusing it generally throughout the whole apartment. In the absence of a spirit-lamp, a narrow-necked bottle may be made use of; but care must be taken that it does not crack when the wick is alight. The lamp is the safest.

Aperients.—For children nothing is better than:—1. Brimstone and treacle; to each teacupful of this, when mixed, add a teaspoonful of cream of tartar. As this sometimes produces sickness, the following may be used: 2. Take of tartrate of soda one dram and a half, powdered jalap and powdered rhubarb, each fifteen grains, ginger, two grains; mix. Dose for a child over five years, one small teaspoonful; over ten years, a large teaspoonful; for a person over twenty, three teaspoonsful, or the whole, as may be required by the habit of the person. This medicine may be dissolved in warm water, common or mint tea. This powder can be kept for use in a wide-mouthed bottle, and be in readiness for any emergency.

Apothecaries' Weight.—Twenty grains make one scruple, three scruples one dram, eight drams one ounce, twelve ounces one pound. Medicines are always purchased wholesale by avoirdupois weight. For compounding liquids, an apothecary's glass measure will be found indispensable. A two or three ounce size will be large enough for most purposes.

Apples—to keep.—1. Having selected the best fruit, wipe it perfectly dry with a fine cloth, then take a jar of suitable size, the inside of which is thoroughly coated with cement, and having placed a layer of fine sand perfectly dry at the bottom, place thereon a layer of the fruit—apples or pears, as the case may be—but not so close as to touch each other, and then a layer of sand; and in this way proceed till the vessel is full. Over the upper layer of fruit a thick stratum of sand may be spread and lightly pressed down with the hands. In this manner choice fruit perfectly ripe may be kept for almost any length of time, if the jar be placed in a situation free from moisture.

2. Take fine dry sawdust, preferably that made by a circular saw from well seasoned hard wood, and place a thick layer on bottom of a barrel. Then place a layer of apples, not close together and not close to staves of the barrel. Put sawdust liberally over and around, and proceed until a bushel and a half, or less, are so packed in each barrel. They are to be kept in a cool place.

Apple Butter.—Boil new cider down to one-half quantity. Pare

cut and core equal quantities of sweet and sour apples. Put the sweet apples into a large kettle to soften a little first, as they are the hardest. Add enough boiled cider to cook them. After boiling half an hour, stirring often, put in the sour apples, and add more boiled cider, with molasses enough to sweeten moderately. Boil until tender, stirring to prevent burning. Pack in firkins or stone pots for winter use.

Apple Molasses.—Take new sweet cider just from the press, made from sweet apples, and boil it down as thick as West India molasses. It should be boiled in brass, and not burned, as that would injure the flavor. It will keep in the cellar, and is said to be as good, and for many purposes, better, than molasses.

Apple Punch.—Lay in a China bowl, slices of apples and lemons alternately, each layer being thickly strewed with powdered sugar. Pour over the fruit, when the bowl is half filled, a bottle of claret; cover, and let it stand for six hours, then pour it through a muslin bag, and it is all ready.

Apple Toddy.—One tablespoonful of fine white sugar, four wine-glasses of cider brandy, one-half of a baked apple. Fill the glass two-thirds full of boiling water, and grate a little nutmeg on top.

Arrowroot—substitute for.—Finest potato starch, seventy-five pounds lump sugar, four pounds finely-ground rice, twenty-one pounds. Mix, and sift through lawn; yields one-hundred pounds excellent arrowroot.

Artichokes—to pickle.—Gather young artichokes as soon as formed; throw them into boiling brine, and let them boil two minutes; drain them; when cold and dry, put them in jars, and cover with vinegar, the only spices employed should be ginger, mace, and nutmeg.

Artificial Skin—for burns, bruises, etc.—Take gun cotton and Venice turpentine, equal parts of each, and dissolve them in twenty times as much sulphuric ether, dissolving the cotton first, then adding the turpentine, keep it corked tightly. Water does not effect it, hence its value for cracked nipples, chapped hands, surface bruises, etc., etc.

Articles of Dress—to renovate.—Oils and fats are the substances which form the greater part of simple stains. They give a deep shade to the ground of the cloth; they continue to spread for several days; they attract the dust and retain it so strongly, that it is not removable by the brush; and they eventually render the stain lighter-colored upon a dark ground, and of a disagreeable gray tint upon a pale or light ground. The general principle of cleansing all spots consist in applying to them a substance which shall have a stronger affinity for the matter composing them than this has for the cloth, and which shall render them soluble in some liquid menstruum, such as water, spirits, oil of turpentine, etc. Alkalies would seem to be proper in this point of view, as they are the most powerful solvents of grease; but they act too strongly upon silk and wool, as well as change too powerfully the colors of dyed stuffs, to be safely applicable in removing stains. The best substances for this purpose are:—1. Soap. 2. Chalk, fullers' earth,

soap-stone. These should be merely diffused through a litt.e water into a thin paste, spread upon the stain, and allowed to dry. The spot requires now to be merely brushed. 3. Ox-gall and yolk of eggs have the property of dissolving fatty bodies without affecting perceptibly the texture or colors of cloth, and may therefore be employed with advantage. The ox-gall should be purified, to prevent its greenish tint from degrading the brilliancy of dyed stuffs, or the purity of whites. 4. The volatile oil of turpentine will only take out recent stains, for which purpose it ought to be previously purified by distillation over quick lime. Wax, resin, turpentine, pitch, and all resinous bodies in general, form stains of greater or less adhesion, which may be dissolved out by pure alcohol.

Asparagus—to cook.—Scrape the stalks till they are clean; throw them into a pan of cold water, tie them up in bundles of about a quarter of a hundred each; cut off the stalks at the bottom all of a length, leaving enough to serve as a handle for the green part; put them into a stew-pan of boiling water, with a handful of salt in it. Let it boil, and skim it. When they are tender at the stalk, which will be in from twenty to thirty minutes, they are done enough. Watch the exact time of their becoming tender; take them up that instant. While the asparagus is boiling, toast a slice of bread about half an inch thick; brown it delicately on both sides; dip it lightly in the liquor the asparagus was boiled in, and lay it in the middle of a dish; melt some butter, but do not put it over them. Serve with butter.

Asparagus—as a lawn-plant.—A friend suggests a very good idea as to asparagus: "Of course the old plan of sticking the plant in close beds is all wrong. There are many bits of fine soil in gardens, even the so-called pleasure grounds, and hardy plant borders, where a strong clump of the common asparagus would be a great ornament as well as of use. I shall plant a hundred or more good clumps of asparagus in our borders here, partly for its tender shoots in spring, partly for its spray for cutting during the summer and autumn months, but mainly for its feathery grace as a beautiful, hardy plant. In many a villa garden, even where good asparagus may never be seen raised in the ordinary way, a capital supply could be obtained by simply dotting a few plants here and there in borders, and on the margin of shrubberies, not only as single specimens, but as groups and masses—never, however, nearer to each other than four feet."

Asthma—simple remedy for.—Take a strong saturated solution of nitrate of potassa; dip tinder into it, and then allow it to dry. Procure a wide-mouth phial, the cork of which has an aperture in the center, so as to admit any hollow tube whatever—a pipe closed at the end for example. Light the piece of tinder and place it in the phial. Then cause the patient to inhale the gases that are disengaged, either through mouth or nostrils. At the end of a few respirations he will find relief which will augment. In regard to an explanation of this mode of treatment, it is supposed that a small portion of oxygen, disengaged by the combustion of the nitrate of potassa, is inhaled by the patient.

It is known that in asthmatic patients the sanguinous circulation is incomplete in the lungs, and the blood is imperfectly regenerated, that it is black, and does not burn its excess of carbon. By the oxygen absorbed, therefore, combustion may be facilitated.

Asthma—relief for.—The following simple contrivance will frequently be found to give relief to those who suffer from difficulty in breathing, arising from asthma and also from other causes: Keep a kettle of water boiling upon the fire, or over a spirit-lamp, and affix to the spout of it a tin tube, of such length and form as shall serve to throw off the steam in front of the patient. This will create a moist, warm atmosphere, and prevent that distressing sensation which is always occasioned to asthmatic patients by breathing the dry cold air of the night.

Asthma Remedies.—1. Elecampane, angelica, comfrey, and spikenard roots with hoarhound tops, of each, one ounce; bruise and steep in honey, one pint. Dose, a tablespoonful taken hot every few minutes, until relief is obtained, then several times daily until a cure is effected.

2.—Oil of tar, one dram; tincture of veratrum viride, two drams; simple syrup, two drams; mix. Dose, for adults, fifteen drops three or four times daily. Iodide of potassium has cured a bad case of asthma, by taking five grain doses three times daily. Take one-eighth ounce and put it in a phial, and add thirty-two teaspoons of water; then one teaspoon of it will contain the five grains which put into one-half gill more water, and drink before meals.

Asphalt (for walks, etc.)—Materials.—Coal-tar, road-sand, or coal-ashes. Level the place intended to be covered with asphalt, give it a thin coat of tar, and sift over this some dry road-sand or coal-ashes. Let it harden, and repeat the operation four or five times.

Ashes from Soil—by spontaneous combustion.—Make your mound twenty-one feet long by ten and one-half feet wide. To fire, use seventy-two bushels of lime. First a layer of dry sods or parings on which a quantity of lime is spread, mixing sod with it; then a covering of eight inches of sods, on which the other half of the lime is spread, and covered a foot thick, the height of the mound being about a yard. In twenty-four hours it will take fire. The lime should be fresh from the kiln. It is better to suffer it to ignite itself than to effect it by the operation of water. When the fire is fairly kindled, fresh sods must be applied; but get a good body of ashes in the first place. I think it may be fairly supposed that the lime adds fully its worth to the quality of the ashes, and, when limestone can be got, I would advise the burning a small quantity in the mounds, which would be a great improvement to the ashes, and would help to keep the fire in.

Attar of Roses—to make.—Fill a large earthen jar, or other vessel, with the leaves of rose-flowers picked over and freed from all dust and dirt. Pour upon them as much pure spring water as will cover them, and from sunrise to sunset, for six or seven days in succession, set the vessel where it will receive the sun's rays. At the end

of the third or fourth day a number of particles of a fine yellow oily matter will float on the surface, which, after a day or two, will gather into a scum. This is the attar of roses. It must be taken up as often as it appears, with a piece of cotton tied to a stick, and squeezed from this into a small phial, which must be kept corked and tied over.

Autumn Leaves—to preserve and use.—Autumn leaves are used in various methods, the most popular being, perhaps, to dry them flatly and carefully, and take great care to preserve their stalks. When thoroughly dry they are varnished, which gives them a pretty gloss, and also acts as a preservative to them from all insects and moths. After this they are carefully laid aside for the decoration of the winter dinner table, and may be most safely preserved in a tin box with a well fitting cover. Grasses added to them are very effective, and when dry they may be dyed. They may be also frosted when dry, by dipping each stalk into a solution of alum and leaving them to dry upright. With the grasses and leaves may be used the dried everlasting flowers and the prepared moss, but no little taste is needed in their arrangement to avoid the least heaviness of effect. I have found that glass vases and stands are the most effective for their arrangement, as the transparancy of these increase the wished-for lightness and grace.

Awnings—to make waterproof.—Plunge first into a solution containing twenty per cent. soap, and afterward in another solution the same percentage of copper. Wash afterwards.

Axle Grease—to make.—Take one part good plumbago (black lead) sifted through a coarse muslin so as to be perfectly free from grit, and stir it into five quarts of lard, warmed so as to be stirred easily without melting. Stir vigorously until it is smooth and uniform. Then raise the heat until the mixture melts. Stir constantly, remove from the fire, and keep stirring until cold. Apply cold to the axle or any other bearing with a brush. If intended for use where the axle or bearing is in a warm apartment, as the interior of mills, etc., two ounces of hard tallow or one ounce of beeswax may be used to every ten pounds of the mixture. This grease is cheaper in use than oil, tallow or tar, or any compound of them.

Babies—how to put to sleep.—A baby is the most nervous of beings, and the tortures it suffers in going to sleep and being awakened by careless sounds when "dropping off," are only comparable to the same experience of an older person during the acute nervous headache. Young babies ought to pass the first months of their lives in the country, for its stillness no less than its fresh air. But where silence is not to be commanded, baby may be soothed by folding a soft napkin, wet in warmish water, lightly over the top of its head, its eyes and ears. It is the best way to put nervous babies to sleep. It has been tried hundreds of times for a child so irritable that paregoric and soothing syrup only made it wide awake. A fine towel would be wet and laid over its head, the ends twisted a little till it made a sort of a skull-cap, and, though baby sometimes fought against

being blindfolded in this way, five minutes usually sent him off into deep and blissful slumber. The compress cooled the little feverish brain, deadened sound in his ears, and shut out everything that took his attention, so that sleep caught him unawares. Teething babies find this very comfortable, for their heads are always hot, and there is a fevered beating in the arteries each side.

Baby Basket—to make.—Procure a large round basket and a small camp-stool. Measure the size round the top of the basket; get the quantity of material, measure the depth of basket and allow the scallops to fall over the edge. Bind the scallops; fasten it to the edge of the basket, draw it down tightly to the bottom in plaits. Cut a round piece of material the shape of the bottom of basket, fasten it round the edge, and finish with a box-plaiting of ribbons. Make the cushions and pockets to please the fancy. A box-plaiting round the top of basket, also round the scallops. Between each scallop put a bow or cord, and tassels of worsted; fasten this on the camp-stool, around which put a ruffle of the same material the basket is lined with.

Baby Food.—Put one teacupful of oatmeal in two quarts of boiling water, slightly salted. Let it cook two hours and a half, then strain. When cool, to one gill of gruel add one gill of thin cream and one teaspoonful of sugar. To this then add one pint of boiling water, and it is ready for use. This can be digested when milk and all else fail.

Bacon—how to select.—Bacon should have a thin rind, and the fat should be firm and tinged red by the curing. The flesh should be of a clear red, without intermixture of yellow, and it should firmly adhere to the bone. To judge the state of a ham, plunge a knife into it to the bone; on drawing it back, if particles of meat adhere to it, or if the smell is disagreeable, the curing has not been effectual, and the ham is not good. It should, in such a state, be immediately cooked. In buying a ham, a short, thick one, is to be preferred to the long and thin.

Bad Breath—remedy for.—Take eight drops of muriatic acid in half a tumbler of spring-water, and add a little lemon-peel or juice to suit the palate. Let this mixture be taken three times a day for some time, and, if found beneficial, then use it occasionally.

Bad Breath—to relieve.—Bad breath, from catarrh, foul stomach, or bad teeth, may be temporarily relieved by diluting a little bromo-chloralum with eight or ten parts of water, and using it as a gargle, and swallowing a few drops just before going out.

Bag for Knitting Work.—In these days of knitting and crocheting, a small pocket or bag is convenient to hold the balls of wool, silk or cotton, and the needles or crochet hooks. This knitting-work pocket is worn attached to the belt, and is made of ecru linen, and lined with red satin, or any other material that one may fancy. Cut from each of these materials five pieces of the following dimensions: Two inches wide at the top, not allowing for seams, one-half inch

wide at the bottom, and six inches long. These pieces are cut so as to bulge out at the sides, and are each four inches in width at the widest part. Embroider the linen in any design that you may fancy, but it seems desirable that this should be in outline stitch, and done with red silk. Join the linen pieces so that the seams are on the right side; notch them so that they will lie flat, and cover them with red silk braid, cross-stitched with some contrasting tone or color. Join the lining and place inside this, and bind the top with the same braid and fasten down in the same manner. Work a red silk eyelet-hole in one of the side pieces to allow the end of the wool you are working with to come through. Close the bottom of the bag with a bunch of loops of red satin ribbon, and sew an end of the same ribbon, in which is sewed quite a large shield pin to fasten it to the dress belt.

Baking Powder—to make.—Take six ounces of carbonate of soda, four ounces of tartaric acid, two ounces of sugar (very finely sifted), one ounce of salt. All must be mixed very completely together, and, after the flour has been made into dough (with water for bread, or milk for rolls), add one teaspoonful of the powder to every pound of flour, and mix thoroughly. If the powder is to be kept, it must be put into open-mouthed dry bottles, corked and kept in a dry place.

Bald Head—remedy for.—A most valuable remedy for promoting the growth of the hair, is an application once or twice a day, of wild indigo and alcohol. Take four ounces wild indigo, and steep it about a week or ten days in a pint of alcohol and a pint of hot water, when it will be ready for use. The head must be thoroughly washed with the liquid, morning and evening, application being made with a sponge or soft brush. Another excellent preparation is composed of three ounces of castor oil, with just enough alcohol to cut the oil, to which add twenty drops tincture of cantharides, and perfume to suit. This not only softens and imparts a gloss to the hair, but also invigorates and strengthens the roots of the hair.

Balm of Gilead.—Opodeldoc, spirits of wine, sal ammoniac, equal parts of each. Shake. Bottle and label. Cures neuralgia, pains, aches, etc. Apply as a lotion.

Balsam (Indian).—Clear, pale resin, three pounds and melt it, adding spirits of turpentine, one quart; balsam of tolu, one ounce; balsam of fir, four ounces; oil of hemlock, origanum, with Venice turpentine, of each, one ounce; strained honey, four ounces; mix well, and bottle. Dose, six to twelve drops; for a child of six, three to five drops, on a little sugar. The dose can be varied according to the ability of the stomach to bear it and the necessity of the case. It is a valuable preparation for coughs, internal pains, or strains, and works benignly upon the kidneys.

Bandages.—Bandages can be made by tearing a sheet into narrow strips, rolling each one tightly and fastening the end with a pin. Old linen does not mean worn out shirt-fronts, but soft pieces of table-cloths, napkins or cambric handkerchiefs.

Banners—to paint.—Stretch the fabric upon a frame, and finish

your design and lettering. Use a size made of bleached shellac dissolved in alcohol, thinned to the proper consistence, go over such parts as are to be gilded or painted, overrunning the outlines slightly, to prevent the color from spreading. For inside work the white of an egg makes a good size; lay the gold while the size is still wet; when dry, dust off the surplus gold, and proceed with the shading, painting, etc. A little honey, combined with thick glue, is another good size.

Barometer—to make.—Take a long, narrow bottle, and put into it two and one-half drams of camphor; spirits of wine eleven drams. When the camphor is dissolved, add to it the following mixture: Water, nine drams; saltpeter, thirty-eight grains; sal-ammoniac, thirty-eight grains. Dissolve these salts in the water prior to mixing with the camphorated spirit; then shake all well together, cork the bottle well, wax the top, but afterwards make a very small aperture in the cork with a red-hot needle. By observing the different appearances which the materials assume as the weather changes, it becomes an excellent prognosticator of a coming storm or a sunny sky.

Barometers—handy and cheap.—1. One that answers the purpose of indicating the approach of fair or foul weather, can be made as follows: Take an eight-ounce bottle, the glass being clear and white, and put into it six ounces of the highest colored whisky to be obtained, and put into it all the gum-camphor it will dissolve, and a little more. Set in some convenient place. On the approach of rain or bad weather the camphor will settle toward the bottom of the bottle; the heavier the rain, or the more sultry the weather, the closer the camphor will settle to the bottom. Fair weather is indicated by the feather-like appearance of the camphor which rises and floats in the liquid. If alcohol is used, it must be diluted so that it will not be stronger than the whisky, for if it is, so much of the camphor will be held in solution that the atmosphere will have no perceptible effect upon it.

2. Take an eight-ounce phial, and put in it three gills of water, and place in it a healthy leech, changing the water in summer once a week, and in winter once in a fortnight, and it will most accurately prognosticate the weather. If the weather is to be fine, the leech lies motionless at the bottom of the glass and coiled together in a spiral form; if rain may be expected, it will creep up to the top of its lodgings and remain there till the weather is settled; if we are to have wind, it will move through its habitation with amazing swiftness, and seldom goes to rest till it begins to blow hard; if a remarkable storm of thunder and rain is to succeed, it will lodge for some days before almost continually out of the water, and discover great uneasiness in violent throes and convulsive-like motions; in frost, as in clear, summer-like weather, it lies constantly at the bottom; and in snow, as in rainy weather, it pitches its dwelling in the very mouth of the phial. The top should be covered over with a piece of muslin

Basket for Flowers.—Very beautiful baskets for holding flowers can be made of the longer and more feathery kind of mosses. A light frame, of any shape you like, should be made with wire and covered with common pasteboard or calico, and the moss, which should first be well picked over and cleansed from any bits of dirt or dead leaves which may be hanging about it, gathered into little tufts, and sewed with a coarse needle and thread to the covering, so as to clothe it thickly with a close and compact coating, taking care that the points of the moss are all outward. A long handle, constructed in the same manner, should be attached to the basket, and a tin or other vessel filled with either wet sand or water, placed within to hold the flowers. By dipping the whole structure into water once in three or four days. its verdure and elasticity will be fully preserved.

Bath-Bag.—Make a small square bag of flannel, leaving one end partly open. In this put all the remnants of soap as the pieces become too small to handle easily. When the bag is filled, baste up the opening, and it makes a good bath-tub arrangement.

Bathing Rules.—Avoid bathing within two hours after a meal.

Avoid bathing when exhausted by fatigue or from any other cause.

Avoid bathing when the body is cooling after perspiration.

Avoid bathing altogether in the open air, if after having been a short time in the water, it causes a sense of chilliness and numbness of the hands and feet,

Bathe when the body is warm, provided no time is lost in getting into the water.

Avoid chilling the body by sitting or standing undressed on the banks or in boats after having been in the water.

Avoid remaining too long in the water; leave the water immediately there is the slightest feeling of chillness.

The vigorous and streng may bathe early in the morning on an empty stomach.

The young, and those who are weak, had better bathe two or three hours after a meal; the best time for such is from two to three hours after breakfast.

Those who are subject to attacks of giddiness or faintness, and those who suffer from palpitation and other sense of discomfort at the heart, should not bathe without first consulting their medical adviser.

Bay Rum—to make.—Saturate one-quarter pound of carbonate of magnesia with oil of bay; pulverize the magnesia, place it in a filter, and pour water through it until the desired quantity is obtained, then add alcohol. The quantity of water and alcohol employed depends on the desired strength and quantity of the bay rum. Another:—Oil of bay, ten fluid drams; oil of pimento, one fluid dram; acetic ether, two fluid drams; alcohol, three gallons; water, two and a half gallons. Mix, and after two weeks' repose, filter.

Bay Rum.—To one pint of alcohol add one pint of water, one teaspoonful of powdered borax, and one-half dram oil of bay.

Beans—to bake.—Prepare the beans by soaking over night and boiling as usual. I use a quart pot for my pint of beans, as the milk boils over so easily. Put in the beans, salt, and a tablespoonful of molasses, cover well with milk, and refill as it cooks away. Give nine or ten hours' baking in a slow oven, and you will have beans delicious and healthful. People with weak digestive powers can eat beans cooked in this way without harm.

Beds—should be aired.—It must be a false idea of neatness, which demands that beds should be made soon after being vacated. Let it be remembered that more than three-fifths of the solids and liquids taken into the stomach, should pass off through the pores of the skin —seven millions in number—and that this escape is most rapid during the night, while warm in bed. At least one-half of the waste and putrid matter—from twenty to thirty ounces in the night—it must become more or less tangled in the bedding, of course soiling, and a part of this may become reabsorbed by the skin, if it is allowed to come in contact with it on the next night, as it must, if the bedding is not exposed for a few hours in the light. We may well imitate the Dutch example of placing such bedding on two chairs, near the window in the sunlight, or in the window, that the light of the sun—the best purifier known—may dissipate their impurities, or neutralize them. At least three hours, on the average, is as short exposure as is compatible with neatness.

Bed-Bug—remedy.—Blue ointment and kerosene, mixed in equal proportions, and applied to the bedsteads, is an unfailing bed-bug remedy; and a coat of whitewash is ditto for wooden walls.

Beds—to heat.—To heat a bed at a moment's notice, throw a little salt into the warming-pan and suffer it to burn for a minute previous to use.

Bed—to ascertain when it is aired.—Introduce a glass goblet between the sheets for a minute or two, just when the warming-pan is taken out; if the bed be dry, there will only be a slight cloudy appearance on the glass, but if not, the damp on the bed will assume the more formidable appearance of drops, the warning of danger.

Bed-Sores—to prevent.—The patient being often obliged to lie in one position, bed-sores occur—being due to long continued pressure on parts whose general vitality is weakened. They usually form at the lower end of the backbone. Much may be done to prevent them by keeping the under sheet perfectly smooth, clean, and dry. Pressure on any one point may be avoided by changing the position frequently. The parts of the body resting most heavily on the bed, when the skin is not broken, should be sponged three or four times daily with alcohol or whisky and water. Air cushions, so made as to remove all pressure from the lower end of the backbone, are useful.

Beef—to corn.—Put six gallons of pure water in a large wash kettle, and add thereto six ounces of saltpeter, and set down to boiling. When the saltpeter is fully dissolved and the water boiling, immerse

your beef, previously, cut into convenient pieces for family use, in the boiling saltpeter water. It can be held so in the water on a large flesh fork, or long hook. Let it remain immersed while you count ten, slowly. Take out, let it get quite cold, and then pack closely and firmly in the cask or barrel. To your boiling saltpeter water now add six pounds of fine salt, three pounds of pure, dry sugar, one quart of best molasses, and one of pearlash. Boil slowly, and as the impurities arise, skim off. If your water should have been long boiling, while immersing the beef, add half a gallon more to supply loss by evaporation. When this pickle is perfectly cold, pour over the beef and hold down by heavy weight. The scalding of the beef in the saltpeter water closes the pores, prevents the juice of the meat going out into the pickle, and instead of the strong, tough, juiceless and salty stuff usually sold as corned beef, you have a juicy, compact, tender piece of beef. Use above quantity for one hundred pounds of beef.

Beef (good)—to choose.—The grain of ox beef, when good, is loose, the meat red, and the fat inclining to yellow. Cow beef, on the contrary, has a closer grain, a whiter fat, but meat scarcely as red as that of ox beef. Inferior beef, which is meat obtained from ill-fed animals, or from those which had become too old for food, may be known by a hard, skinny fat, a dark red lean, and, in old animals, a line of horny texture running through the meat of the ribs. When meat pressed by the finger rises up quickly, it may be considered as that of an animal which was in its prime; when the dent made by pressure returns slowly, or remains visible, the animal had probably passed its prime, and the meat consequently must be of inferior quality.

Beef—spiced.—Boil a chine of ten or twelve pounds until the meat falls from the bone, pick the meat to pieces, mash the gristle fine, rejecting all parts too hard to mash. Cool the liquor and take off all the fat, boil it down to one and one-half pints, then return the meat, and while hot add salt and pepper to taste, and if relished, a little nutmeg, sage and one-half teaspoonful of cloves, and same of cassia. Let it boil up once and put it in a mould, pan, or deep dish to cool. Slice as wanted.

Beef—to cure quickly.—To cure fresh beef, hams, or shoulders, in a short time, put one or two pounds of good salt in a kettle or spider, and heat it over the stove until all the moisture is expelled and the salt is so hot that it will hiss when a drop of water is dropped in. It will take about two pounds of salt to one hundred pounds of meat. Just before removing from the fire, where it must be constantly stirred, add one ounce of pulverized saltpeter to each pound of salt, or in that proportion. Have the meat ready; if hams, lay them on the skin-side, and over all parts where the flesh is exposed rub thickly with brown sugar; then with a large iron spoon apply the hot salt, which will penetrate the meat and take the sugar with it. Cover well with this salt, and lay in a box on a shelf in the same

position for two days, when the hams can be smoked if desired, and they will have all the flavor of sugar-cured hams. Treat beef in the same way, one side at a time, and after two of three days hang up to dry. I have prepared the finest dried beef I ever saw in this way.

Beef—to keep.—To keep fresh beef, mutton or fish, in warm weather without salt, dissolve borax in water at the rate of one-quarter of a pound of borax to one gallon of water. Cool the meat, and then cover with this liquid in a clean jar or barrel. It can be kept for weeks in this way. Salt can be added to season, if desired.

Beef—to boil.—The round is the best boiling piece. Put the meat in the pot, with water enough to cover it; let it boil very slow at first. This is the great secret of making it tender. Take off the scum as it rises. From two to three hours, according to size, is the time for boiling.

Beef—to roast.—The nicest pieces for roasting are the sirloin and rib pieces; the "middle or second cut ribs" are considered the best, but the "first cut ribs" are the smallest and most suitable for a small family. Ask your butcher to remove the bone, roll the meat into a round shape, and tie securely with a stout string. Then, before sending it to the table, you can remove the string and insert one or two steel skewers. Before placing the meat to roast dredge all over with flour, seasoned with salt; then place it upon a grating in your dripping-pan and put it in a very hot oven; baste frequently; if the meat is very fat you will need no water in your pan; if not, you had better pour a small cup of boiling water into the pan after it has been in the oven fifteen minutes. A piece weighing eight or nine pounds will cook in an hour, that is, if you like your meat rare. Remove the meat when done to a heated dish, skim the drippings, add a little boiling water (a little browned flour if you wish), and boil up once; then strain it and send to table in a gravy-boat.

Beef—balls.—Any piece of cold beef or other meat may be chopped fine, mixed with cold potato also chopped, bread-crumbs, and chopped hard-boiled eggs. Season well with salt and pepper, make into flat balls, and fry as you would codfish balls. They are excellent.

Beef—frizzled.—Chip the beef as thin as paper with a very sharp knife. Melt in a frying-pan butter the size of an egg, stir the beef about in it for two or three minutes, dust in a little flour, add half a teacupful of rich cream, boil and serve in a covered dish.

Beef Tea (frozen).—For children and invalids it has been found to be a successful method to freeze beef tea, and to administer it in lumps to children or patients to suck. They will take it in this form rather than any other kind of food.

Bees—how to manage.—The great secret, or charm, as many people suppose it to be, can all be summed up in one word—"smoke." One can handle them just as well as another, if they have the nerve and determined will to do so; and this knowledge and the bee-smoker are the first requisites. The bee-smoker is a small bellows with a tin

fire-box attached for burning rotten wood or cotten rags, or, in fact, anything that will burn and make a good smoke. There are now a half dozen or more kinds in the market that sell for from seventy-five cents to two dollars, so that no one who keeps even a single hive of bees need have any excuse for being without one. I will say, emphatically, never go to a hive of bees to do anything with them without your smoker trimmed and burning. The first thing before disturbing the hive in any way, puff a few whiffs of smoke in at the entrance; this will generaly drive in the sentinels, and also prevent any from coming out. If they are Italians, this will almost always be sufficent; but if they are crosser kinds, it had better be repeated a few times. This will frighten and excite them, and they will at once fill themselves with honey, which makes them very docile, unless they are accidentally pinched. After waiting a few minutes, the lid or cover to the hive may be raised, but do it gently; in fact, always do every thing gently about them, as all quick motions or jars of the hive tend to exasperate them. As soon as you raise the lid a little, send in more smoke, and enough if necessary, to drive them down and out of the way; then proceed to put on or take off boxes, or do all the work necessary. If they begin to come up or to dispute your right, use more smoke to convince them you are master of the situation. But from the very start just make up your mind that you *can* and *will*, and that is half the battle. With Italians, after the first few puffs of smoke, they can often be handled for an hour or two without any more smoke, but with blacks or hybrids it may be necessary to repeat the dose every few minutes. Smoke does not injure them at all.

Bee-Hive Covers—to prevent leaking.—To prevent bee-hive covers from leaking, tack on flour sacks and give them two good coats of paint, and they will stand out doors for years and not leak a drop.

Bee Stings—cure for.—Take a pinch in the finger of common salt, put on the place stung and dissolve with water, rub with the finger. If not relieved in one minute wet the place with aqua ammonia. Care should be taken not to get the ammonia into the eye. I have used this remedy for several years and it has never failed with me. It has always arrested the poison and prevented swelling.

Beeswax—to render.—To render beeswax, put the wax into a thin muslin bag, and add some pebbles to make it sink into a wash-boiler containing water. Let it boil, then press out the wax with a pair of squeezers (i. e. two narrow boards fastened together at the end with a cord). Then skim and pour into a bucket partly filled with warm water, and set away to cool.

Beer (Ginger).—1. To a pail half-filled with boiling water add one pint of molasses and two spoonfuls of ginger; when well stirred, fill the pail with cold water, leaving room for one pint of yeast, which must not be put in until the preparation becomes lukewarm. Place it on a warm hearth for the night and bottle in the morning.

2. White sugar, twenty pounds; lemon juice, eighteen ounces; honey, one pound; bruised ginger, seventeen ounces; water, eighteen

gallons; boil the ginger in three gallons of the water for half an hour; then add the sugar, the juice, and the honey, with the remainder of the water, and strain through a cloth; when cold add the white of an egg and half an ounce of the essence of lemon; after standing four days, bottle. This beverage will keep for many months.

Beer (Hop).—Mix fourteen pounds of molasses and eleven gallons of water well together, and boil them for two hours with eleven ounces of hops. When quite cold add a cupful of yeast, and let the mixture ferment for sixteen hours in a tub covered with a sack. Then put it in a cask and keep it filled. Bung it down in two days, and in seven days it will be fit to drink, and will be stronger than London porter.

Beer (Root).—Mix together a small amount of sweet fern, sarsaparilla, winter-green, sassafras, princesspine, and spicewood. Boil them with two or three ounces of hops and two or three raw potatoes, pared and sliced in three or four gallons of water. After boiling five or six hours, strain off the liquor, and add to it common molasses in the proportion of one quart to three gallons of the beer. If it is too thick, dilute it with water. A half pound of browned bread added to the liquor, will increase its richness.

Beer (White Spruce).—Mix together three pounds of loaf sugar, five gallons of water, a cup of good yeast, adding a small piece of lemon-peel, and enough of the essence of spruce to give it flavor. When fermented, preserve in close bottles. Molasses or common brown sugar can be used, if necessary, instead of loaf, and the lemon-peel left out. Sometimes, when unable to obtain the essence of spruce, we have boiled down the twigs. This will be found a delightful home drink.

Belladonna Mixture.—To be taken as a preventive when fevers or any infectious complaints are prevalent. Extract Belladonna, five ounces; Aquæ Cinnamomi, two ounces. Take fifteen drops of the above in a tablespoonful of water every morning for ten or twelve days. Children to have as many drops as they are years old.

Belting—ways to manage, etc.—Leather belts will last double the usual time if treated with castor oil, will be rat proof, will always remain flexible and will not crack. A belt four inches wide will be equal to one six inches wide without it. It requires about twenty-four hours to penetrate the leather; if used sooner the greasiness will cause it to slip. A leather belt should have a speed of one thousand three hundred feet per minute, and not more than one thousand eight hundred feet or it will not last long. Leather belts, with grain side to pulley will drive thirty-five per cent. more than the flesh side, because it is less porous, thus admitting less air between the surfaces. Pulleys covered with leather will evolve full fifty per cent. more power than the naked pulley. To increase the power of rubber belting, use red lead, French yellow and litharge, equal parts; mix with boiled linseed oil and japan sufficient to make it dry quick. This will produce a highly polished surface. Experiments without lubricants resulted in showing the following co-efficients: Oak upon oak, sixty-two; wrought

iron on oak, forty-nine to sixty-two; cast iron on oak, sixty-five; wrought iron on cast, nineteen; cast iron on cast, sixteen; cast iron axles on lignum-vitæ bearings, eighteen; copper on oak, sixty-two; iron on elm, twenty-five; pear tree on cast iron, forty-four; iron axles on lignum-vitæ bearings (with oil), eleven; iron axles with brass bearings (with oil), seven. A belt five inch wide, velocity one thousand feet per minute, on leather covered pulleys, will yield five horse power; double the speed and it will evolve double the power.

Bengal Lights—to make.—Take of nitrate of potassa (saltpeter), eight parts; sublimed sulphur, four parts; and antimony, one part; let them be well mixed in powder and beat firmly into a stout iron cup, and set on fire; if a little camphor be added it is still more brilliant. Such lights are made use of for communicating at a great distance by sea at night.

Benzine—uses of.—Benzine dissolve fats and oils, resins, varnishes, paint, etc., so readily, that it is largely used for the purpose of cleaning clothing and other fabrics. It is within the recollection of many that benzine was once rather costly, and could only be purchased in small bottles at a high price. Now it is cheap; the makers of kerosene produce so much more benzine than there is a demand for, that, at wholesale at least, it bears but a nominal price. Benzine, in careless hands, is a very dangerous article, and no one should use it without understanding its properties, that accidents may be guarded against. It boils at one hundred and forty °F., and at all ordinary temperatures rapidly evaporates. When this vapor is mingled with the air, the two form a mixture which, in contact with a flame, will explode violently. The vapor of the benzine, when not mixed with air to form an explosive mixture, will readily take fire and burn rapidly. A bottle partly filled, in a warm room, will give off the vapor so freely, that it will take fire even when at a distance of several inches from a lamp. In working with benzine, always use it by daylight, and in a room without a fire, or so far from a fire that there can be no danger. These facts can not be too thoroughly impressed upon all who have occasion to use this liquid for any purpose. In using benzine and other solvents for removing grease or other spots from fabrics, a mere wetting often is given, and after the benzine has evaporated, the place looks worse than before. By applying a little benzine, the grease or other substance is dissolved, and this solution spreads to the surrounding portions of the cloth, and the evil is increased. We must use the liquid in such a manner as to dissolve the grease, and then to carry away the solution—we must, in fact, wash out the spot with benzine. To do this, it is not necessary to immerse the article or a large portion of it. In removing a spot, first fold some old woolen cloths, or even porous newspapers, to form a thick pad. Place this pad under the article, and wet the spot with benzine. Use a sponge or a roll of woolen cloth, and rub the spot, adding more benzine as it is taken up by the pad below. In this manner the benzine holding the grease, etc., in solution, is absorbed by the pad, and the solution is washed out

of the cloth by successive quantities of benzine, to be also carried down into the pad. Success depends upon using sufficient benzine; it is cheap, and one need not be sparing of it. Gloves are cleaned by immersing them in benzine in a wide-mouthed glass-stoppered bottle. The gloves are shaken up with the liquid for a few minutes taken out, squeezed, and hung under a chimney to dry. If any spots are left, these are rubbed with a rag wet with benzine. If the gloves retain any odor, they are placed on a plate, covered by another, and whole set upon a kettle of boiling water. The heat will soon drive off the odor.

Billiousness—remedy for.—If the victim of this diseased condition will exercise due care they need not ransack creation for "anti-bilious pills." The bile does not belong in the stomach, but reaches there in consequence of improper food, too much of the oily, as butter, pork, lard, etc. The bile is nature's grand cathartic medicine, passing from the liver in a direction to indicate that it is to pass on into the bowels, there to perform its important mission. When the liver is overtaxed by too much labor, or by the presence of too much greasy food, digestion is impaired and the whole system becomes out of order. If one would avoid biliousness, let him fast, passing over one or more meals. As soon as the "mouth tastes bad," the tongue is coated, the appetite flags—the best possible evidence that too much food has been taken—thus allowing nature to rally, the accumulated food to pass off, and the system be relieved. In nine cases out of ten, this fasting will remove the difficulty, save a fit of sickness, and cheat the doctor! Any quack nostrum that will do as much as fasting, would yield a fortune to the inventor. Many of them, however, if not most, increase disease, rather than improve health.

Bird Lime.—Take any quantity of the middle bark of the holly. Boil it in water for several hours, until it becomes quite soft. Drain off the water, and place the holly bark in a hole in the earth, surrounded with stones; here let it remain to ferment; and water it, if necessary, until it passes into a mucilaginous state. Then pound it well, and wash it in several waters. Drain it and leave it for four or five days to ferment and purify.

Birds—to preserve.—Small birds may be preserved as follows:—Take out the entrails, open a passage to the brain, which should be scooped out through the mouth; introduce into the cavities of the skull and the whole body some of the mixture of salt, alum, and pepper, putting some through the gullet and whole length of the neck; then hang the bird in a cool, airy place, first by the feet that the body may be impregnated by the salts, and afterwards by a thread through the under mandible of the bill, till it appears to be sweet then hang it in the sun, or near a fire; after it is well dried, clean out what remains loose of the mixture, and fill the cavity of the body with wool, oakum, or any soft substance, and pack it smooth in paper.

Biscuit (Tea).—To one quart of sifted flour add two teaspoonfuls of baking powder and one teaspoonful of salt. Mix these together

and pass them through a sieve in order to thoroughly blend them. Now add sufficient sweet milk to make a batter, then heat your gem pans hot, and fill them half-full of the batter and bake in a hot oven. These are a delicious little biscuit, applicable to either breakfast or tea, and can be made and baked in ten or fifteen minutes.

Biscuit (Milk).—To a quart of flour put one cup of buttermilk, or clabber, one heaping tablespoonful of salt; work up very slightly and set the dough in a warm place for four or five hours; then add a half teaspoonful of soda; knead smoothly, and bake in a moderate oven.

Biscuit (Sour Milk).—Biscuits made with sour milk or cream of tartar should be handled as little as possible and put as soon as made into a hot oven. A warm oven makes soggy biscuit. The colder the milk or water used in making them, the lighter and more tender they will be.

Bites and Stings—cure for.—Apply instantly with a soft rag, most freely, spirits of hartshorn. The venom of stings being an acid, the alkali nullifies them. Fresh wood ashes, moistened with water, and made into a poultice, frenquently renewed, is an excellent substitute, or soda or saleratus, all being alkalies.

Bites (of snakes and dogs)—treatment.—1. Apply immediately strong hartshorn, and take it internally; also give sweet oil and stimulants freely; apply a ligature right above the part bitten, and then apply a cupping-glass.

2. In case of a bite of a venomous serpent the old historic method of sucking the wound with the lips is one of the first things to be resorted to. If the poison is in the circulation the use of strong brandy or whisky, in quantites powerful enough to produce intoxication, must be resorted to. The bite of a mad dog should be cauterized at once by a pencil of lunar-caustic, or by application of irons heated white. The peculiarity of hydrophobic poison is that it remains in the spot where the bite occurs, for several days or weeks; and not uutil this poison ferments does it become dangerous. Dr. Hewett, a surgeon of London, allowed himself to be bitten no less then eighty times by rabid dogs, each time successfully cauterizing the wound. He fell a victim to his temerity, however, for one day he was found dead with a pistol-shot from his own hand. A statement was left in his papers that he had neglected the cauterization too long, and feeling the first symptoms of hydrophobia, he preferred to die without the long agony.

3. Pliny affirms that the mustard plant is a sovereign remedy against the bite of most venomous serpents; it is only necessary to apply it to the wound.

Bitters (Stomach).—Gentian root, six ounces; orange peel, ten ounces; cinnamon, one ounce; anise seed, two ounces; coriander seed, two ounces, cardamon seed, one-half ounce; Peruvian bark unground, two ounces; bruise all the articles and add one ounce gum kino, put in two quarts alcohol and two quarts pure spirit, or good whisky may

be used instead of pure spirit; shake occasionally for ten days, and filter through three thicknesses of woolen; then one-half pint of this may be added to a gallon of whisky, more or less as desired.

Bitters (Stoughton).—Three-fourths of an ounce Peruvian bark, one ounce wild cherrybark, two ounces gentian root bruised, one ounce dried orange peel, one ounce cardamon seed bruised; keep in one gallon spirits two or three weeks. Cures dyspepsia, etc.

Blackberry Tea.—The "blackberry tea" so much used in domestic practice in various parts of the country, is made not from the berries, but from the root. The root is not only employed as a family remedy, but our most skilled physicians find that, in chronic cases, it is most useful, and agrees with the stomach when other medicines will not be retained. We have known obstinate cases of the "army diarrhœa" to yield to this simple remedy when other medicines had failed. Those who wish to avail themselves of the remedial properties of the blackberry, should make use of the root. It does not appear that there is any perceptible difference in the roots of the several species; those of the running and bush forms of the blackberry have the same properties. As one or more species is to be found in every part of the country, a useful and inexpensive remedy is everywhere at hand. The usual method of preparing it is to add an ounce of root to a pint and a half of water, and simmer slowly until reduced to a pint, and strain. A dose of this tea for an adult is a wineglassful; for a child, one to three teaspoonfuls. While it is preparing, bits of orange-peel may be added, to give a pleasant flavor. This tea was much used by the surgeons of both armies in the late war with great success, and it is now much employed by physicians.

Blackberry Syrup.—Blackberry syrup may be prepared, to be kept at hand for use, in the following manner: Four ounces of blackberry root and one dram each of cinnamon, cloves, and nutmeg, are gently simmered for an hour in a quart of water. The liquid is then strained off, and two pounds of sugar added. When cold, add a wineglassful of brandy, and bottle for use. The dose for a child is a teaspoonful, and for an adult a tablespoonful.

Blackberry Wine—to make.—Blackberry wine, the usual process for other fruit juices may be followed. To a gallon of the berries, well bruised, add a quart of boiling water. Allow these to stand for twenty-four hours, stirring occasionally. Then strain and press out the juice, and add two pounds of sugar to each gallon. Place the liquid in a jug to ferment. The jug must be kept full by adding from time to time some of the juice kept for the purpose. When fermentation ceases, cork the jug, and keep in a cool place three or four months, after which the wine may be bottled, carefully pouring it off from the sediment. Of course larger quantities may be made with the same proportions, in a cask.

Blackberry Brandy.—Take ten gallons of brandy, and use five quarts nice rich blackberries, mashed; macerate the berries in the liquor for ten days, then strain off, and add one ounce sugar to each

gallon. If strawberries are used, work the same proportions with only half the quantity of sugar.

Blackbirds—food of.—The natural food of the blackbird is berries, worms, insects, shelled-snails, cherries and other similar fruit; and its artificial food, lean fresh meat, cut very small, and mixed with bread or German paste.

Blacking—for harness.—Melt four ounces of mutton suet with twelve ounces of beeswax, add twelve ounces of sugar candy, four ounces of soft soap dissolved in water, and two ounces of indigo finely powdered. When melted and well mixed, add half a pint of turpentine. Lay it on the harness with a sponge, and polish off with a brush.

Blacking—for boots and shoes.—Ivory black, two pounds; molasses, two pounds; sweet oil, one pound; rub together till well mixed, then add oil vitriol, three-quarters of a pound; add coarse sugar, one-half pound, and dilute with beer bottoms. This cannot be excelled.

Blacking—for boots and shoes.—Ivory black, one and a half ounces; molasses, one and a half ounces; sperm oil, three drams; strong oil of vitriol, three drams; common vinegar, half a pint. Mix the ivory black, molasses and vinegar together, then mix the sperm oil and oil of vitriol separately, and add them to the other mixture.

Blacking—for leather.—Fill a bottle half full of nails, or rusty bits of iron, then fill with sharp vinegar; shake every few days for awhile; in a few weeks it will be fit for use. It improves with age. When used down, fill up again with vinegar. When boots become red, wet in the blacking and oil them. They will look as good as new. The oil sets the color, and it will neither rub or wash off. It is good for all kinds of leather, and will not injure it in the least.

Black Walnut—to polish.—To give black walnut a fine polish, so as to resemble rich old wood, apply a coat of shellac varnish, and then rub it with a smooth piece of pumice-stone until dry. Another coat may be given, and the rubbing repeated. After this, a coat of polish, made of linseed oil, beeswax, and turpentine may be well rubbed in with a dauber, made of a piece of sponge tightly wrapped in a piece of fine flannel several times folded, and moistened with the polish. If this work is not fine enough, it may be smoothed with the finest sandpaper, and the rubbing repeated. In the course of time the walnut becomes very dark and rich in color, and in every way is superior to that which has been varnished.

Black Clothes—to restore.—Boil three ounces of logwood in a quart of vinegar, and when the color is extracted, drop in a piece of carbonate of iron the size of a large chestnut. Let it boil five minutes. Have the article to be dyed sponged with soap and hot water, laying them on the table and sponge them all over with it, taking care to keep them smooth, and brush downward. When completely wet with the dye, dissolve a teaspoonful of salaratus in a teacup of warm water, and sponge over with this, which sets the color so nothing rubs off. They must not be wrung or wrinkled, but carefully

hung up to drain. The brownest cloth may be made a perfect black in this simple manner. So many people have faded garments that this reciepe may be of service in restoring them to a lively color.

Black—to color.—Allow four pounds of woolen material to one-half pound of copperas. Wring the goods very dry out of warm water, and put into the copperas that has been boiling in water an hour. Set aside until cool enough to wring, then wash thoroughly in clear cold water. Boil two pounds of logwood tied in a bag one hour. Allow the articles to remain in this till cool enough to wring, then put them in water that dry clover has been steeped in, for about half an hour to prevent smutting. Dry thoroughly and wash.

Black Tongue—in cattle.—The symptoms are inflammation of the mouth, swelling of the head and face, discharge of bloody saliva, and high fever, marks the first stages. Ulcers soon appear under and on the sides of the tongue. Then the throat and neck swell, and if the disease is not checked gangrene ensues and the animal dies. The disease is said to yield readily to early and proper treatment. The following has proved very successful: The animal should be bled from the neck vein. Give him castor oil, one pint, to be repeated in ten hours if it should not operate. Then use the following: Powdered burnt alum, four ounces; chloride of lime, two ounces; corn meal, two quarts. Mix, and with this powder swab the mouth frequently.

Blauc Mange.—Take a handful of Irish moss, wash thoroughly in several waters, add a few pieces of stick cinnamon, and tie up loosely in a piece of mosquito netting. Boil about fifteen minutes in one quart of milk; turn the milk into a mould or bowl previously wet with cold water; let it stand until cold. When ready for use, turn it out upon a dish. If boiled enough, it will keep its form. Eat with sugar and cream.

Blankets—to cleanse.—Put two large teaspoonfuls of borax and a pint bowl of soft soap into a tub of cold water. When dissolved, put in a pair of blankets, and let them remain over night. Next day rub and drain them out, and rinse thoroughly in two waters, and hang them to dry. Do not wring them.

Blankets—to clean.—When soiled they should be washed, and not scoured. Shake the dust from them, plunge them into plenty of hot soapsuds, let them lie till the hands can be borne in the water, wash quickly, rinse in new clean hot suds, shake thoroughly, stretch well, dry, and they will be as nice as new.

Blankets—to wash.—Take half a cake of soap, cut it into small pieces and dissolve it thoroughly in hot water. Pour this into enough cold water to cover the blankets; add two ounces of borax (pulverized dissolves most readily), and put your blankets to soak all night. In the morning take them out and squeeze most of the water out of them and rinse thoroughly in cold water, in which a little borax has been dissolved; put them through a second rinsing water and then through the blueing water. Do not wring or squeeze them this time, but hang them up to drain and dry. The easiest way is to take them, while in

the last water, out under the clothes line, as it is not convenient to carry them when full of water. It is best not to double them over the line, but hang by one end or side. Of course you want a sunny day for drying them nicely, and if you put them to soak at night and the next day is stormy, it will not hurt them to soak longer. If the wool is very greasy, use more soap and borax. Fine flannels and baby's crocheted skirts and sacques are nice when washed in this way, and if you use cold water they will not shrink. Vary the proportions of soap and borax to suit the quantity of water. I would not advise you to wash colored goods in this way, as they might fade.

Blankets (white wool)—to wash.—To wash wool blankets, we should make a suds from nice hard soap, and make it warm enough to be comfortable to the hands and proceed to rub them through two waters, using no soap except that which is dissolved in the water. Rinse in water of the same temperature as that in which they were washed, shake out and dry smoothly, then fold and press by laying a weight upon them. If white blankets are washed in this way, they will not shrink, and will retain their whiteness for many years.

Blanket (Roman)—to knit.—Five stripes, three of black and two of Roman colors. Stripes are fifty stitches wide, and two hundred and seventy-five ribs long. Knit garter stitch. Take off the first and seam the last stitch in each row. Crochet strips together with four stitches black, four white; and four yellow. Material. Germantown wool sixfold, one and three-eighths pounds of black, one-fourth pound of cherry, one-fourth pound of blue, one-fourth pound pearl white, and two ounces of yellow, shade bordering on orange. For fringe, one thread of yellow with three of black for black stripes, Roman colors for Roman stripes. Arrangement of colors: One row of white, one row of blue, one row of cherry, one row of blue, one row of yellow, one row of cherry, one row of white, twelve rows of blue, one row of white, one row of cherry, one row of blue, one row of yellow, one row of white, one row of cherry, one row of blue, ten rows of white, one row of blue, one row of white, one row of cherry, one row of blue, one row of yellow, one row of cherry, one row of white, sixteen rows of cherry.

Bleeding—from the nose.—From whatever cause, bleeding from the nose may generally be stopped by putting a plug of lint into the nostrils; if this does not do, apply a cold lotion to the forehead; raise the head, and place both arms over the head, so that it will rest on both hands; dip the lint plug, slightly moistened, into some powdered gum-arabic, and plug the nostrils again; or dip the plug into equal parts of powdered gum-arabic and alum. An easier and simpler method is to place a piece of writing paper on the gums of the upper jaw, under the upper lip, and let it remain there for a few minutes.

Bleeding—to stop.—If a man is wounded so that blood flows, that flow is either regular, or by jets or spurts. If it flows regularly, a vein has been wounded, and a string should be bound tightly around

below the wounded part, that is, beyond it from the heart. If the blood comes out by leaps or jets, an artery has been severed, and the person may bleed to death in a few minutes; to prevent which apply the cord above the wound, that is, between the wound and the heart. in case a string orcord is not at hand, tie the two opposite corners of a handkerchief around the limb, put a stick between and turn it round until the handkerchief is twisted sufficiently tight to stop the bleeding, and keep it so until a physician can be had.

Bleeding—of a wound.—The following simple remedies may be made use of: Soak some linen rags in strong vinegar, burn it and strew the ashes on the wound, or bruise the tops of stinging-nettles and place them over it, or apply a good dressing of the powder of ripe puff-balls. In certain cases it may be desirable to tie two or three tight ligatures near the lower part of each joint, and slacken them gradually. This will assist in stopping the flow of blood.

Bleeding—to stop the flow.—1 Take the fine dust of tea or the scrapings of the inside of tanned leather and bind it close upon the wound, and blood will soon cease to flow. These articles are at all times accessible and easy to be obtained. After the blood has ceased to flow laudanum may be advantageously applied to the wound.

2. For bleeding, take linen or other rags, burn to charcoal and put it in the wound and no more blood will come.

Blister—to dress.—Spread a little blister compound on a piece of common adhesive plaster with the right thumb. It should be put on just thickly enough to conceal the appearance of the plaster beneath. The part from which a blister has been taken should be covered over till it heals with soft linen rags smeared with lard.

Blistered Hands or Feet.—When the hands are blistered from rowing, or the feet from walking or other causes, be careful not to allow the blisters to break, if possible. Some persons are in the babit, by means of a needle and piece of worsted, of placing a seton into blisters to draw off the water; but in our opinion this is a great mistake and retards the healing. Bathe the blisters frequently in warm water, or, if they are very severe, make a salve of tallow, dropped from a lighted candle into a little gin and worked up to a proper consistence, and on going to bed cover the blisters with this salve and place a piece of clean soft rag over them.

Blood Blister—to treat.—When a finger is bruised so as to cause a blood-blister under the nail, it should immediately be drilled with a knife or other sharp-pointed instrument, and the blood allowed to escape. This affords instant relief to an injury which may otherwise become exceedingly painful

Blood Purifier.—Mix half an ounce sulphate of magnesia with one pint water. Dose, a wineglassful three times a day. This can be used in the place of iron tonic, or in connection with it.

Blueing—for clothes.—Take one ounce of soft Prussian blue, powder it and put it in a bottle with one quart of clear rain water,

and add one-half ounce of pulverized oxalic acid. A tablespoonful is sufficient for a large washing.

Boils—treatment of.—These should be brought to a head by warm poultices of camomile flowers; or boiled white lily root, or onion root by fermentation with hot water, or by stimulating plasters. When ripe they should be destroyed by a needle or lancet; but this should not be attempted until they are fully proved.

Boiled Flour—useful in cases of very relaxed bowels.—Tie up half a pound or a pound of flour in a cloth quite tight, boil it for twelve hours, then let it cool out of the water. When cool reduce it to powder, and give a teaspoonful at a time as a dose. It may be taken dry or moistened with a little milk or weak brandy and water.

Boots (Rubber)—to mend.—Procure some pure gum, which can be bought at any wholesale rubber house, or you can have your druggist order it for you at a cost of about five cents per ounce. At the same time order patching, and it is well to have two thicknesses for mending different goods. Put an ounce or two of gum into three or four times its bulk of benzine, cork tightly and allow it to stand four or five days, when it will be dissolved. Wet the boots with benzine for an inch or more around the hole and scrape with a knife. Repeat this wetting with benzine and scraping several times until thoroughly cleaned, and a new surface exposed. Wet the cloth side of the patching with benzine and give one light scraping, then apply with a knife a good coating of the dissolved rubber, both to the boot and patch, and allow it to dry until it will not stick to your fingers, then apply the two surfaces and press or lightly hammer into as perfect compact as possible, and set away for a day or two, if possible, before using.

Boots (Wet)—treatment of.—When boots are wet through, do not dry them by the fire. As soon as they are taken off, fill them quite full with dry oats. This grain will rapidly absorb every vestige of damp from the wet leather. As it takes up the moisture it swells and fills the boot like a tightly fitting last, keeping its form good, and drying the leather without hardening it. In the morning shake out the oats and hang them in a bag near the fire to dry, ready for use on another occasion.

Boot and Shoe Preservative.—It is said two parts tallow and one of resin, melted together and applied to the soles of new boots or shoes, as much as the leather will absorb, will double their wear.

Borax—substitute for.—Alum two ounces, dilute with water and mix with two ounces potash, boil in pot half an hour over a gentle fire, take it out of the water, add two ounces gem salt in powder, as much of alkaline salt, three pounds honey, and one of cow's milk, mix all together, set it in the sun for three days, and the borax is ready for use. This will go twice as far in a blacksmith's shop as common borax.

Borax—uses of.—It may be interesting to some to know that a weak solution of borax-water snuffed up the nostrils, causing it to

pass through the nasal passage to the throat, then ejecting it from the mouth, will greatly relieve catarrh, and in cases not too obstinate or long standing, will, if persevered in, effect a permanent cure. It is also of great value in case of inflamed or weak eyes. Make a solution (not too strong), and bathe the eye by opening and shutting it two or three times in the water. This can be done by means of an eye-cup, or equally well by holding a handful of the water to the eye. Another difficulty, with which many persons are afflicted, is an irritation or inflammation of the membrane lining the cavities of the nose, which becomes aggravated by the slightest cold, often causing great pain. This can be greatly relieved, if not entirely cured, by snuffing borax-water up the nostrils two or three times a day. The most difficult cases of sore throat may be cured by using it simply as a gargle. As a wash for the head it not only leaves the scalp very white and clean, but renders the hair soft and glossy. It has also been found by many to be of invaluable service in case of nervous headache. If applied in the same manner as in washing the hair, the result is wonderful. It may be used quite strong, after which rinse the hair carefully with clear water; let the person thus suffering remain in a quiet, well-ventilated room, until the hair is nearly or quite dry, and if possible, indulge in a short sleep, and there will hardly remain a trace of the headache. If clergymen, teachers, and others, who have an undue amount of brain work for the kind and quality of physical exercise usually taken, would shampoo the head in this manner about once a week, and then undertake no more brain work until the following morning, they would be surprised to find how clear and strong the faculties had become, and there is reason to hope there would be much less premature decay of the mental faculties. As a toilet requisite it is quite indispensible. If used to rinse the mouth each time after cleaning the teeth it will prevent the gums from becoming diseased or uncleanly. In short, in all cases of allaying inflammation there is probably nothing better in *materia medica*. The average strength of the solution should be a small teaspoonful to a toilet-glass of water.

Bots in Horses—cure for.—Give the horse, first, two quarts of new milk and one quart molasses; fifteen minutes afterwards give two quarts very strong sage tea; thirty minutes after the tea, give three pints (or enough to operate as physic), of curriers' oil. The molasses and milk cause the bots to let go their hold. the tea puckers them up, and the oil carries them completely away. Cure, certain, in the worst cases.

Bouilli (French).—The most common disht hroughout France is a piece of plainly boiled fresh beef, from which the soup has been partly made, and which is separately served up as bouilli, accompanied by strong gravy and minced vegetables or stewed cabbage. Now this, as dressed in the French mode, is ever delicate, both in fibre and flavor; while, in the usual manner of boiling it, it is almost a ways hard and insipid. The reason, says that celebrated cook,

Careme, is this: "The meat is put in the pot with the usual quantity of cold water, and placed at the corner of the fireplace, where, slowly becoming hot, the heat gradually swells the muscular fibres of the beef, dissolving the gelatinous substance therein contained, and disengaging that portion which chemists term "osmazone," and which imparts savor to the flesh—thus both rendering the meat tender and palatable, and the broth relishing and nutritive; while, on the contrary, if the pot be inconsiderately put upon too quick a fire, the boiling is precipitated, the fibre coagulates and hardens, the osmazone is hindered from disengaging itself, and thus nothing is obtained but a piece of tough meat, and a broth without taste or succulence."

Borers—to protect trees from.—An Ohio farmer washes his apple trees every spring and fall with a strong lye that will float an egg, and finds it to be sure death to the borers. He claims that he has not lost a tree since beginning this practice, although he had lost several previously.

Box Measures.—Farmers and market gardeners will find a series of box measures very useful and they can be readily made by any one who understands the two-foot rule, and can handle the saw and the hammer. A box sixteen by sixteen and one-eighth inches square and eight inches deep, will contain a bushel, or 2150.4 cubic inches, each inch in depth holding one gallon.

A box twenty-four by eleven and one-fifth inches square and eight inches deep will also contain a bushel, or 2150.4 cubic inches, each inch in depth holding one gallon.

A box twelve by eleven and one-fifth inches square and eight inches deep will contain half a bushel, or 1075.2 cubic inches, each inch in depth holding half a gallon.

A box eight by eight and one-fourth inches square and eight inches deep will contain half a peck, or 298.8 cubic inches. The gallon dry measure.

A box four by four inches square and four and one-fifth inches deep will contain one quart, or 67.2 cubic inches.

Brains—to cook.—To a cultivated appetite these are among the choicest parts of any animal. Brains should be soaked in water to remove all the blood from them; then they may be fried in butter till well done. A nice way of preparing them is to boil them in milk for about twenty minutes, pour off the milk and pour over them vinegar. Cooked in this way they are as nice as pickled oysters, from which they can scarcely be told.

Brain Stimulant.—The best possible thing for a man to do when he feels too weak to carry anything through, is to go to bed and sleep as long as he can. This is the only recuperation of brain power, the only actual recuperation of brain force; because during sleep the brain is in a state of rest, in a condition to receive and appropriate particles of nutriment from the blood, which take the place of those which have been consumed by previous labor, since the very act of thinking burns

up solid particles, as every turn of the wheel or screw of the steamer is the result of consumption by fire of the fuel in the furnace.

Brain—enlargement of.—This chiefly effects children, and consists in an unnatural growth of the brain. The skull may grow with it, and there be no symtoms of disease, though children with this large brain are apt to die of some brain disease. The symptoms of enlargement of the brain are, dullness of intellect, indifference to external objects, irritable temper, inordinate appetite, giddiness, and habitual headache. Sometimes there are convulsions, epileptic fits, and idiocy. There is also a pecular projection of the parietal bones in this disease.

Treatment.—As much as possible, repress all exercise of the mind. Do not suffer the child to go to school; but put it to the most active and muscular exercise in the open air. The moment there is any heat in the top of the head, apply cold water, ice, or cold evaporating lotions. The diet should be very simple, bread and milk only, if, as the child grows up, the signs of the disease increase.

Brandy (Cherry)—to make.—Good whisky, ten gallons; wild black cherries, five quarts, well bruised with stones broken; common almonds shelled, one pound; white sugar, cinnamon, cloves and nutmeg, well bruised, of each one-half ounce. Mix and let stand twelve days, and draw off. This, with the addition of two gallons brandy, makes the most superior cherry brandy.

Brandy (Cognac).—To every ten gallons of pure spirits add two quarts New England rum, or one quart Jamaica rum, and from thirty to forty drops oil cognac, cut in one-half pint alcohol, and color with burnt sugar to suit.

Brass or Silver—to clean.—To clean brass and silver, and polish the same, use aqua ammonia and rotten-stone, followed by rouge, applied with soft leather.

Brass or Copper—several ways to clean and polish.—1. First remove all the stains, by rubbing the brass with a flannel dipped in vinegar; then polish with a leather and dry rotton-stone.

2. Rub the surface of the metal with rotton-stone and sweet oil, then rub off with a piece of cotton flannel, and polish with a piece of soft leather. A solution of oxalic acid rubbed over brass soon removes the tarnish, rendering the metal bright. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. A mixture of muriatic acid and alum dissolved in water imparts a golden color to brass articles that are steeped in it for a few seconds.

3. Brass ornaments should be first washed with a strong lye made of rock alum, in the proportion of one ounce of alum to a pint of water. When dry, rub with leather and fine tripoli. This will give to brass the brilliancy of gold.

4. Copper utensils or brass articles may be as thoroughly cleaned and look as bright by washing them with a solution of salt and vinegar as by using oxalic acid, and the advantage of running no risk of poisoning either children or careless persons. Use as much salt as

the vinegar will disolve, and apply with a woolen rag, rubbing vigorously, then polish with pulverized chalk, and the article will look like new, with little labor, as the acid of the vinegar is very efficient in removing all stains from either copper or brass.

5. The quickest and easiest way to brighten copper or brass, is to wet a cloth in a strong solution of oxalic acid, and rub till it is clear, then dip a dry flannel into tripoli or prepared chalk, and rub it well.

6. A good paste for cleaning brass may be made by mixing one part oxalic acid and six parts rotten-stone, with equal parts of train oil and spirits of turpentine, making a thick paste of the whole.

7. Clean brass with a solution made by dissolving one tablespoonful oxalic acid and two tablespoonfuls tripoli in a half pint of soft water. Apply with a woolen rag, and after a few minutes wipe dry and polish.

8. Wash with warm water to remove grease, then rub with a mixture of rotten stone, soft soap, and oil of turpentine, mixed to the consistence of stiff putty. The stone should be powdered very fine and sifted; and a quantity of the mixture may be made sufficient to last for a long time. A little of the above mixture should be mixed with water, rubbed over the metal, then rubbed briskly with a dry clean rag or leather, and a beautiful polish will be obtained.

Bread—to make.—My yeast is made of a pint of pared, boiled and mashed potatoes; put a half pint of flour in with them, then pour on about a pint of the water in which they were boiled, stir this together and then add a pint of warm water, if the weather is cold, and one pint of yeast. Keep it in a warm place to rise; take one pint of this with flour enough to make a sponge, or rising, as some people call it; it will rise in about two hours, and this much will make up six pints of flour; make it up tolerably stiff, knead it well, and you will have good bread if it is baked properly

Bread (Graham).—Prepare a sponge as for white bread; put into your baking-pan the next morning a proportionate quantity of flour, two-thirds Graham and one-third white, to every quart of which you will allow a large handful of Indian meal and a teaspoonful of salt. Make a hole in the center of this and pour in your sponge, with two tablespoonfuls of molasses for each medium sized loaf. The dough must be very soft. It will take a longer time to rise than white bread; when light knead again, make into loaves, and set in a warm place for a second rising. Bake steadily in a moderate oven for a much longer time than you would allow for wheat bread. Rapid baking will spoil it. In this you must acquire judgment by experience. The most essential point in the making of the dough is to keep it very soft.

Bread (fried).—A good way to use the yolks of eggs when you have them left after making cake with the whites, is to keep them in a cool place; in the morning beat them well, and dip slices of bread in them and fry brown. Stale bread may be used for this.

Bread—to make.—Perplexed housekeepers will find no trouble with the bread sponge not rising during the night, by using the fol-

lowing method: At breakfast time, mix two tablespoonfuls of flour, one of sugar, and one of salt, and scald with one pint of boiling water; when cool, add a yeast cake, or its equivalent in yeast, and set to rise until noon. When putting on the dinner potatoes, add about ten extra ones, and, when boiled and peeled, mash them fine, and scald with three quarts of water. When cool, add to the first mixture, and set to rise until night. It is then ready for use, and should be kept in a crock, not too tightly closed, in a comparatively warm place. This will make six loaves of bread, and leave enough to raise the next mixture. In making the bread, use a pint of the mixture to each loaf, sifting in the requisite amount of flour, and kneading to taste, no other ingredients being necessary. Mold at once, and place in the baking-pan. Set to rise near the stove, or over a kettle of warm water if in great haste, and it will be ready to bake in three or four hours.

Bread (Boston brown).—Two quarts of unbolted rye meal well mixed with one quart of yellow corn meal, one teaspoonful salt, one large teaspoonful of soda, dissolved in one cupful of molasses. Work up with cold water, with the hands, to a very stiff loaf, put in a buttered pan, smooth over the top with the back of a spoon, wet; steam at least four hours, and then dry off for twenty minutes, in the oven. This is always good, and is the genuine article. The steaming is the best part of it, for the longer corn and rye meals are cooked, without drying, the better they are.

Bread (brown).—Four cups of corn meal, three of rye, one of molasses, one large teaspoonful of soda dissolved in warm water. Mix very thin, steam three hours, and bake half an hour. Try it.

Bread (brown)—steamed.—Four cups corn meal, two cups flour, one cup molasses, two cups sour milk, two and one-half or three cups of sweet milk or water, (some meal requires more wetting), one teaspoonful soda, one and one-half teaspoonful salt; steam three and one-half or four hours.

Bread (rye).—Set a sponge over night, with one cupful yeast, six potatoes boiled and mashed fine, with three cupfuls wheat flour, one pint warm water, two tablespoonfuls lard, two tablespoonfuls brown sugar, beat up well and set it aside to rise; in the morning mix with one quart warm milk, one teaspoonful salt, one cupful Indian meal, and enough rye flour to make it into a pliable dough, knead well, and let it rise from five to six hours, then work over again; divide into loaves, putting these into well greased deep pans; this second rising should last an hour; if your ovens are in good condition, one hour should bake the above quantity of bread.

Bread (Scotch short).—One pound flour, one-half pound butter, six ounces sugar, cream butter and sugar together, and add the flour; roll one-half inch thick, bake slowly, don't bake brown.

Bread (salt rising.)—Into a pint of fresh milk pour a pint of scalding water. Stir in smoothly, flour enough to make it a thick batter, keep at a uniform temperature for about six hours, when it will raise

and should be at once used. Sift into a bowl three quarts of flour, pour in the yeast, add warm milk or water to wet up all the flour, salt to taste, knead lightly, put into pans, let it rise and then bake Great care is needed at every stage in making this bread; the yeast should be used just when it passes from the saccharine to the vinous fermentation, and before it gets the least bit sour. Just at the same point the raised dough must be put into the oven. The dough should be as soft when put into the pans as it can be conveniently handled. Some kinds of flour will not make good salt-rising bread. The dish in which the yeast is stirred must be perfectly sweet or it will sour before it rises. There is no sweeter or more wholesome bread than this when it is skillfully made.

Bread—to keep moist.—Have the dough stiff when it is set for the last rising. The larger the proportion of flour to that of moisture in the dough the longer it will keep moist. After the bread is baked and cold, put it in a tin box or an earthen jar with close cover, and keep it covered tightly. Bread thus made, and kept cool, and always from the air, will last and be moist for a week.

Bread (stale)—to freshen.—In order to freshen stale bread pursue the following plan: Dip the loaf wrapped in a clean cloth into boiling water; let it remain there for half a minute, then take off the cloth, and bake the loaf for ten minutes in a slow oven.

Bread Crumbs—to utilize.—The waste of bits of bread in some families is unpardonable. Every fragment of clean bread, if no bigger than a pea, should be saved and used. If attention be given to this, the quantity of crumbs that would otherwise be wasted, will astonish one who tries it. Do not allow the crumbs to mould; place them on a plate in the stove oven with the door open, until they are quite dry. Then roll the crumbs, until they are as fine as meal, and keep in a carefully closed vessel; a fruit can is excellent. Crumbs prepared in this way, are useful to bread chops or cutlets, oysters for broiling, egg-plant for frying; they make the most perfect of bread puddings, and are unequaled for stuffings.

Breakfast Dish.—A good breakfast dish can be prepared from the remains of yesterday's dinner, providing that consisted in part of roast mutton. Chop it fine and put it in a saucepan with a cup of of gravy or of soup stock; season with pepper and salt, and scatter over it, stirring all the time a tablespoonful of flour; let the meat heat gradually and, when "boiling hot," set the pan on the back part of the stove, and poach some eggs to serve with the meat, when the eggs are done put the meat on a platter, and lay the eggs around the edge. With fried potatoes, muffins, and good coffee, a wholesome breakfast may be provided at small expense.

Breakfast Hints.—The housekeeper should study variety in the breakfasts she offers her family, not only from day to day, but changing them as much as possible with the seasons. The things which are the most suggestive of comfort on a cold winter's morning are by no means tempting in July, when we need not only lighter clothing,

but lighter food. Too often the meal loses all character in a continual round of steak or chops, the year through, and dainty dishes which are really less expensive are ignored. Cold meats and chicken can easily be made into croquettes, or minced and well seasoned and served on slices of water toast. Eggs can be cooked in such a variety of ways that one need never tire of them, and the same may be said of potatoes. In their season, tomatoes sliced and served with Mayonaise dressing, or a simple dressing of oil and vinegar, are very nice for breakfast. There is no more wholesome or tempting addition to the morning meal than fruit served as a first course. Oat meal porridge, too, is so healthful an article of food that it should be used universally. If it is necessary in order to economize time in the morning to set the breakfast table the night before, it should be covered with an old linen tablecloth, or something of the kind kept for the purpose. The tea or coffee service should be placed in a line at one end of the table before the hostess; it is no longer customary to stand them on a tray. Mats, which are prettiest if they are pure and white, are put at the opposite end of the table for one or more substantial dishes, and at the sides for vegetables. A table set in this way looks much better than when the host and hostess set opposite each other at the sides of the table, as in that case all the larger dishes are crowded in the center. A fork should be placed at the left of each plate and a knife and spoon at the right. The tablespoons and pepper and salt stands are arranged at the corners of the table. If fruit which requires handling is to form the first course, as oranges or peaches, a plate upon which is a doily, finger bowl, fork and fruit knife, may be set at each place. After the fruit has been removed the more substantial part of the breakfast is brought on. The pot in which the coffee is made should be of a kind which is presentable at table, as the coffee is not so good if it is poured off the grounds into an urn. If it is not possible to have cream for it boiled milk with a spoonful of condensed milk in each cup to make it richer is the best substitute. Cakes to be eaten with syrup should be served at the last of the meal, and the plates and knives and forks changed for them. It is well to have all plates which will be needed ready for use on the buffet, except in winter, when they may be consigned to the plate-warmer.

Brewis.—There is an old-fashioned dish made of brown bread crusts and pieces called brewis, which is very nice. Put the slices of bread, the crusts and broken pieces into a hot oven until they are well browned, then break them and put into a sauce pan with enough boiling milk well seasoned with salt and butter to cover the bread. Simmer slowly for an hour or two, adding milk as it boils away or is absorbed by the bread. Serve hot, and you will have a wholesome and palatable dish.

Britannia Metal—to clean.—1. Rub the article with a piece of flannel moistened with sweet oil; then apply a little pounded rotten-stone or polishing paste with the finger till the polish is produced,

then wash the article with soap and hot water, and when dry, rub with soft wash leather, and a little fine whiting.

2. To clean britannia metal, use finely powdered whiting, two tablespoonfuls of sweet oil and a little yellow soap. Mix with spirits of wine to a cream. Rub on with a sponge, wipe off with a soft cloth and polish with a chamois skin.

Broadcloth—to remove stains from.—Take one ounce of pipe-clay that has been ground fine, and mix it with twelve drops of alcohol, and the same quantity of spirts of turpentine. Moisten a little of this mixture with alcohol, and rub it on the spots. Let it remain till dry, then rub it off with a woolen cloth, and the spots will disappear.

Bronchitis and Asthma Specific.—An unfailing source of relief from the agonies of bronchitis and spasmodic asthma will be found in the following specific; The juice of two lemons, which have been warmed in the oven to dry the skins, four ounces of the best honey, two spoonfuls of the very finest Florence oil. Mix carefully, put in an earthen jar, which keep covered, and swallow a spoonful when you feel the fit coming on.

Bronze for Brass.—Take one ounce of muriate of ammonia, half an ounce of alum, and a quarter of an ounce of arsenic, dissolved in a pint of strong vinegar. This will make a good bronze for brass work.

Brooms—care of.—A large picture ring screwed into the top of the handle, is the nicest thing made by which to hang up a broom. A strong screw, with a small head, should be placed in the wall at a proper height to receive it.

Brooms—to toughen.—If brooms are wet in boiling suds once a week they will become very tough, will not cut a carpet, will last much longer, and always sweep like a new broom.

Bronchocele—to cure.—Iodide of potasium (often called hydriodate of potash), two drams; iodine, one dram; water, two and a half ounces; mix and shake a few minutes, and pour a little into a phial for internal use. Dose, five to ten drops before each meal, to be taken in a little water. External application: With a feather, wet the enlarged neck, from the other bottle, night and morning, until well. It will cause the scarf skin to peel off several times before the cure is perfect, leaving it tender; but do not omit the application more than one day at most, and you may rest assured of a cure, if a cure can be performed by any means whatever.

Bugs—to drive from vines.—Ashes moistened with kerosene are recommended for keeping striped bugs from cucumbers, melon and squash vines.

Bulbs—to hasten the blooming of.—Dissolve twelve ounces of nitrate of potash, four ounces of common salt, three ounces of pearl-ash, five ounces of moist sugar in one quart of rainwater, and put a desert-spoonful of this liquid into the flower-glass, which should be filled with soft water so as not quite to touch the bulb. Change the

water, and add some more of the liquid every nine days. In changing the water no not remove the bulb, but merely tilt the glass on one side.

Bulbs—manure for.—An ounce of nitrate of soda dissolved in four gallons of water is a quick and good stimulant for bulbs, to be applied twice a week after the pots are filled with roots, and the flower spikes are fairly visible. A large handful of soot, or about a pint, tied up in a piece of old canvas, and immersed in the same quantity of water for a day or two, will furnish a safe and excellent stimulant; also good and safe is a quarter of a pound of cow manure mixed in a large garden pot of water, and used as required. Any of these stimulants will do good, or the whole of them applied alternately will benefit bulbs that need more sustenance than the soil affords.

Bunion Remedy.—Bunions may be checked in their early development by binding the joint with adhesive plaster, and keeping it on as long as any uneasiness is felt. The bandaging should be perfect, and it might be well to extend it round the foot. An inflamed bunion should be poulticed, and larger shoes be worn. Iodine, twelve grains; lard or spermaceti ointment, half an ounce, makes a capital ointment for bunions. It should be rubbed on gently twice or three times a day.

Bunion Cure.—Bunions may be cured by applying iodine, freely, twice a day, with a feather. For cure of corns or chilblains the same is recommended.

Burns and Scalds.—The following has been tested in the severest cases of burning and scalding from railway and steamboat accidents: Glycerine, five ounces; white of egg, four ounces; tincture of arnica, three ounces; mix the glycerine and white of egg thoroughly in a mortar and gradually add the arnica. Apply freely on linen rags night and morning, previously washing with warm castile soap-suds. In urgent cases, if nothing better can be had, clap on a mud poultice, a favorite and very effectual remedy with schoolboys who are stung while making war on hornets' nests.

Burns—general remedies for.—1. Some few years since I accidenally found that a poultice of tea leaves, applied to small burns and scalds, afforded immediate relief, and I determined to give it a more extensive trial when opportunity should present, which soon occurred. It was in a case of a child fourteen months old. Upon examination I found the anterior portion of the body, arms and legs blistered and deeply burned from a kettle of hot water which the child had upset upon itself. The case, to say the least, was unfavorable for the success of any remedy. I prepared a large poultice, softening the leaves with hot water, and, while yet quite warm, applied it upon cotton wool over the entire burned surface. Almost like magic the suffering abated and, without the use of any other anodyne, the child soon fell into a quiet sleep. In a few hours I removed the application, and re-applied it where it was necessary. I found the parts discolored and apparently tanned. The acute sensibility and tenderness

had nearly disappeared, and the little patient passed through the second and third stages under far more favorable circumstances (symptoms) than was at first anticipated, making a recovery in about two weeks.

2. Gather some large, white lilies, take the white leaves or petals of the flower, and put them in a jar containing olive oil; close it, and keep it for use. It is better old, and it will keep for years. When wanted, take a leaf or two, according to the size of the burn, and put it, well covered with the oil, on the burn; renew, at first often, as the oil is soon absorbed; then at longer intervals till healed.

3. A piece of vegetable charcoal laid on a burn at once sooths the pain, and if kept applied for an hour cures it completely.

4. Sulphate of iron has been tried by M. Joel, in the children's hospital, Lousanne, France. In this case a child, four years of age, had been extensively burnt; suppuration was abundant, and so offensive, that they ordered the child a tepid bath, containing a couple of pinches of sulphate of iron. This gave immediate relief to the pain, and being repeated twice a day—twenty minutes each bath—the suppuration decreased, lost its odor, and the child was soon convalescent.

5. A deep or a superficial burn extending over a large surface, should be bathed with sweet oil, or equal parts of sweet oil and lime water or cream. A simple burn may be treated with cloths wrung out in warm soda water. Dry applications may be made, if more convenient, of flour powdered starch or fuller's-earth. In any case let the dressings remain until the burn heals, unless it is absolutely necessary to remove them.

6. Bicarbonate of soda—which is simply the cooking soda found in every kitchen—is a new remedy for burns and scalds. The injured part should be moistened, dry powdered soda sprinkled on it, and the whole wrapped in a damp cloth. The relief is often instantaneous.

7. For burns and scalds nothing is more soothing than the white of an egg, which may be poured over the wound. It is softer as a varnish for a burn than collodion, and being always at hand can be applied immediately. It is also more cooling than the sweet oil and cotton which was formerly supposed to be the surest application to allay the smarting pain. It is the contact with the air which gives the extreme discomfort experienced from the ordinary accident of this kind, and anything which excludes the air and prevents inflammation is the thing to be applied.

8. When cooking, you often burn your fingers or arms, and there is not time to turn to tie them up. Take a piece of hard soap, and dipping it in water, rub it over the spot. Continue to do this two or three times until the surface is thoroughly covered. It will be found to afford great relief. Or you may dip your burned hand in the soft-soap bucket and hold it there a few minutes, and you will experience the same relief.

9. The true physiological way of treating burns or scalds is to at

once exclude the air with cotton batting, flour, scraped potato, or anything that is handiest.

Burning Oil—test for.—Heat water in a pot on the fire to one hundred and twenty degrees Fahrenheit. Take a tin and put in it a tablespoonful of the oil you wish to test, place the tin containing the oil in the hot water, let it cool down to one hundred and twelve degrees Fahrenheit, when at this point, approach a light very cautiously toward the oil, and if it takes fire before the light touches it you will be safe in rejecting it.

Business Information.—Demand notes are payable on presentation without grace, and bear legal interest, after a demand has been made, if not so written. The presentation or demand must be made at the place where the note is payable, if stated; if not stated, at the maker's place of business, within business hours; should he have no place of business, then at his residence.

An endorser on a demand note is holden only for a limited time, variable in different states.

If time or payment is not stated in a note, it is held payable on demand.

A negotiable note must be made payable either to bearer, or be properly endorsed by the person to whose order it is made. If the endorser wishes to avoid responsibility, he can endorse "without recourse."

A joint note is one signed by two or more persons, who each become liable for the whole amount.

Three days' grace are allowed on all time notes, after the time for payment expires; if not then paid, the endorser, if any, should be legally notified, to be holden.

Notes falling due Sunday, or on a legal holiday, must be paid the day previous.

Notes dated Sunday are void.

Notes given by minors are void.

Altering a note in any manner by the holder makes it void.

The maker of a note that is lost or stolen is not released from payment if the amount and consideration can be proven.

Notes obtained by fraud, or given by an intoxicated person, cannot be collected.

An endorser has a right of action against all whose names were previously on a note endorsed by him.

Butter Jar—to cleanse.—Take clabber milk and beat it; then use the hot whey. There will be no need of soap, as the whey kills the grease. Afterward wash in water.

Butter—how to make.—Be sure the pasture is of the best, and that it contains a variety of the sweetest grasses. Do not change from winter food to spring pasture too suddenly, and, particularly, do not turn out your cows too early to shift for themselves.

Let the milking be done by quiet persons, whether male or female,

at regular times morning or evening, knowing always that the milking is conducted as cleanly as it is quietly.

Know that the utensils for holding the milk are of the best description and always scrupulously clean.

See that the milk is perfectly cooled to free it of animal odor. A thermometer is an absolute necessity in all well regulated dairies.

Be sure the room for setting milk is cool, and so it may be darkened at will. Thorough ventilation is one of the golden rules in dairying. The temperature of the dairy room should never be more than sixty degrees, nor less than forty degrees.

Skim the milk as soon as the first indication of getting thick from lopper are shown. Turn the cream slowly into the jar, and stir thoroughly when more cream is added. Keep the receptacle for the cream cool, from fifty to sixty degrees, and cover with some fabrics that will keep out minute insects, and at the same time allow access of air.

Churn when the cream is ripe, that is, when the cream is sour, every day in spring, and every day in summer. Do not allow the cream in the churn to rise much above sixty degrees. Do not churn too fast. There is nothing gained by seeking to bring the butter in a few minutes. From twenty to thirty minutes is about right.

Good grass will make nice colored butter. At such seasons, when the color of butter is pale, use coloring carefully. It is better that butter be rather light than a dark yellow.

When the butter comes in granules, stop churning. Wash with cold water or cold brine; work only enough to bring it to a firm uniform mass. Do not salt heavily; from three-quarters to one ounce of salt to a pound of butter is enough.

Pack in tight, clean, sweet packages; fill to within a half inch of the top, cover with a clean cloth, and add brine to fill until sold. Keep it in the coolest place you have, and there is no reason why you should not get the top price for your butter.

Butter—to color.—As a rule, it is absolutely essential in the winter to color butter in order to make it marketable, or at all attractive as an article of table use at home. There may be a possible exception to this rule, in cases where cows are fed largely upon yellow corn pumpkins, carrots, etc., but this does not lessen the importance of the rule. Of the various substances used in coloring butter, we think that carrots (of the deep yellow variety) give the most natural color and most agreeable flavor. Annatto, however, is principally used, and most satisfactory results. If carrots are used, take two large-sized ones, clean them thoroughly, and then with a knife scrape off the yellow exterior, leaving the white pith; soak the yellow part in boiling milk for ten or fifteen minutes. Strain boiling hot into the cream; this gives the cream the desired temperature, colors it nicely, and adds to the sweetness of the butter.

Butter and Eggs—to preserve.—To three gallons of brine, strong enough to bear an egg, add a quarter of a pound of nice white sugar

and one tablespoonful of saltpeter. Boil the brine and strain carefully. Make your butter in rolls and wrap each in a clean muslin, tying up with a string, pack in a jar, weight down, and pour on the brine. In this way butter will keep a year. Eggs I keep till I get three or four dozen, put them in a wire pail (such as I use for cooking potatoes), dip it in and out of boiling water three times, lay them on the table on a cloth for an hour or two, the pack in a box in bran. If there are any thin shelled ones they will crack when you dip them in the water; those I put aside for early use.

Butter—without ice.—In families where the dairy is small, a good plan to have the butter cool and firm without ice is by the process of evaporation, as practiced in India and other warm countries. A cheap plan is to get a very large-sized, porous, earthen flower-pot, with a large saucer. Half fill the saucer with water, set it in a trivet or light stand—such as is used for holding hot irons will do; upon this set your butter; over the whole invert the flower-pot, letting the top rim of it rest in and be covered by the water; then close the hole in the bottom of the flower-pot with a cork; then dash water over the flower-pot, and repeat the process several times a day, or whenever it looks dry. If set in a cool place, or where the wind can blow on it, it will readily evaporate the water from the pot, and the butter will be as firm and cool as if from an ice-house.

Butter—to cure.—Take two parts of fine salt, one part loaf sugar, one part saltpeter; mix completely. Use one ounce of this mixture to each pound of butter; work well. Bury your butter firkins in the earth in your cellar bottoms, tops nearly leveled with the ground, or store away in a very cool place, covering the butter with a clean cloth and a strong brine on top, and it will keep two years if desired.

Butter—hard in hot weather.—A simple mode of keeping butter in warm weather is to invert a large crock of earthen, or a flower-pot if need be, (varying with the size of the vessel containing the butter,) over the dish or firkin in which the butter is held. The porousness of the earthenware will keep the butter cool, and all the more so if the pot be wrapped in a wet cloth, with a little water in the dish with the butter. Not the porosity of the earthenware, but the rapid absorption of heat by external evaporation causes the butter to become hard.

Butter, Cream, Milk—to preserve.—Butter, cream, milk and flour are peculiarly liable to absorb effluvia, and should, therefore, never be kept in mouldy rooms, or placed where there are sour liquids, aromatic vegetables such as onions, cabbage, and turnips, or smoked fish or bacon, or, indeed, any kind of food or those of strong odor, lest they lose their flavor. But, alas, how much more essential is it, that the utmost care be used in the prohibition of bed-side food and drink in the nursery and the sick room; a practice fraught with constant danger to the sick, and of spreading disease to the well.

Buttermilk—uses of.—Buttermilk is good, especially in fever, as

an article of diet. A cup of fresh buttermilk every day is a cure for liver complaint.

Butterscotch.—Take one pound of sugar, three-quarters of a pint of water, and set over a slow fire; when done, add one and a half tablespoonfuls of butter and lemon-juice to flavor.

Butterfly—to take the impression of.—Having taken a butterfly, kill it without spoiling its wings, which contrive to spread out as regularly as possible in a flying position. Then with a small brush or pencil, take a piece of white paper, wash a part of it with gum-water a little thicker than ordinary, so that it may easily dry. Afterward, laying your butterfly on the paper, cut off the body close to the wings, and, throwing it away, lay the paper on a smooth board, with the fly upward; and laying another paper over that, put the whole preparation into a screw press and screw down very hard, letting it remain under that pressure for half an hour. Afterward take off the wings of the butterfly, and you will find a perfect impression of them, with all their various colors marked distinctly, remaining on the paper. When this is done, draw between the wings of your impression the body of the butterfly, and color it after the insect itself.

Bronchitis—treatment of.—Get from the druggist's a little good wood creosote. Put two drops of it into a bottle holding a pint or so. Pour in a little more than half a pint of clear water, and shake it well; shake well always before using it. Take a mouthful of this, throw the head back, gurgle it some time in the throat, and then swallow it. Repeat this every two hours, more or less, so as to use up the liquid within twenty-four hours. For each subsequent twenty-four hours, use three drops of the creosote in three to four gills of water. This three drops a day may be continued as long as any bronchitis appears. Two to four days is usually enough, though it may be continued indefinitely without harm.

Cabbage Grubs—to destroy.—White grubs at the root of cabbages may be destroyed as follows: Loosen the earth close to the root with a hoe, even so much as to disturb the plant a little. Make a solution of one quart of soft soap to twelve of soft water, and pour about the root in close contact with the plant. One-fourth of a pint of this solution to a plant two or three times during the season is sufficient. Weaker suds poured on the top would destroy the green worm.

Cabbage—made digestible.—Cabbage is made digestible by first slicing, and then putting in boiling water, with a pinch of soda and some salt, and boiling just fifteen minutes.

Cabbage—fertilizer for.—"I am convinced after several years' trial, that cabbage requires rich manure, and it pays when stable or barn-yard manure is rich in itself to add some such material as bone-dust or superphosphate to get more nitrogen and phosphoric acid. Early kinds of cabbage, I also think, requires richer soil than later sorts.

Cabbage (Red)—to pickle.—Strip off the outer leaves, wipe and slice a fine sound cabbage or two extremely thin, sprinkle plenty of

salt over them, and let them drain in a sieve, or on a strainer for twelve hours or more; shake or press the moisture from them, put them into clean stone jars, and cover them well with cold vinegar, in which an ounce of black pepper to the quart has been boiled. Some people merely cover the vegetable with strong, unboiled vinegar, but this is not so well.

Cabbage—to preserve.—Generally a cellar is a very poor place in which to winter cabbage. In most cases cellars are either too damp or too warm to secure just the conditions needed, and consequently the cabbages soon decay, or become flabby and wilted—thereby being very poor in flavor. Make a frame of boards, like a hot-bed frame, banking up earth on the outside, having it six feet wide and of any length necessary, and into this transplant the cabbages about the last of October, in our northern New England climate. Cover this with boards, and over the whole pack straw or leaves, keeping it in place by means of strips of joice or stakes. Another method is to open a trench a foot deep and a foot wide, into which place the cabbage, heads downward, and cover the earth well over them. Over the earth heap leaves, litter or straw, and from both positions the cabbages may be removed during early winter as wanted for use, or they can be kept in either position until April or May, when they may be had for spring use. Cabbages thus kept will winter firm and solid, of good flavor, and when taken out will be in good condition for cooking, by first placing them in cold water for an hour or two before cooking.

Cabbage—to pickle.—Cut the cabbage very fine, and for a six gallon jar take a pint cup nearly full of salt, the same amount of horseradish (cut up in small pieces) and two heaping tablespoonfuls of white mustard seed. Sprinkle a little salt in the bottom of the jar, then put in a layer of cabbage and with a potato masher pound the cabbage down firmly. Then sprinkle on some salt, radish and mustard seed. Then put in another layer of cabbage and proceed as before. Be sure to give every layer of cabbage a good thorough pounding. When your jar is full put an inverted plate on the cabbage, and on that put a twenty pound weight. Let it stand until next morning, then drain off every bit of the brine that has formed (the amount of brine will supprise you), and pour over the cabbage cider vinegar, boiling hot. Right here, let me say, that it spoils vinegar to heat it in iron; use a porcelain kettle or a stone milk crock. Leave the plate on the cabbage to keep it from floating, for it must be kept under the vinegar. Tie several thicknesses of cloth over the top of the jar, then cover closely and set away in a cool place. Some place in the cellar that is just above the freezing point is best for it.

Cake Baking Hints.—When cakes are made without yeast or eggs, soda and powder being the substitutes, they require quick baking in a moderately hot oven, and should be drawn directly when they are done, or they get dry and tasteless. For a plain cake, made with one pound of flour, etc., the time to be allowed in baking would be from forty to fifty minutes, at the outside not more than an

hour. Yeast cakes take longer—say from ten to fifteen minutes—and will bear to be left in the oven rather over the time without much injury. Very rich cakes, in which butter and eggs predominate, take, of course, a much longer time to cook; pound cake taking from an hour and a half to two hours, and bride cake three and a half. On no account should the oven be too hot when the cakes are put in—that is, not hot enough to brown at once; if so, in five minutes the whole outside will be burned, and the interior will stand little chance of being cooked. The old plan of feeling the handle of the oven door to test the heat is not successful; it is better to sprinkle a little flour inside, and shut the door for about three minutes; if at the end of that time it is of a rich, light brown, the cake may be put in, but if burned, the heat must first be lessened. In making cake in cold weather, heat the mixing bowl in hot water, and then beat the butter to a cream; add the sugar and then the eggs, which have been well beaten; add the other ingredients excepting the flour; add the flour last, sifting it over the mixture. In everything excepting pound cake beat the eggs whole; in pound cake beat the whites and yolks separately. Miss Parloa always uses pastry flour for cake. If any flavoring is to be added it should be put in when the butter and sugar are put together. The more stirring given the mixture the lighter it will be, as it will contain more air. Cake is apt to be tough if it is stirred much after the flour is added.

Cake (Coffee).—Mix well together one cup sugar, one cup molasses, one cup butter, one cup of strong coffee as ready for the table, four well beaten eggs; stir into this five cups of flour, in which a teaspoonful of soda has been incorporated, and finally a cup of chopped raisins or English currants, and bake in one or two pans in a hot oven.

Cake (Chocolate).—Take eight eggs, one pound of sugar, half a pound of flour, the grated rind and juice of a lemon, and a quarter of a pound of butter. Beat the whites of the eggs to a stiff froth, cream the butter with half the sugar; when the yolks are beaten light, with the rest of the sugar, add the butter, then the stiff whites, and finally stir the flour in slowly; season, and bake in round, shallow tin, called jelly-cake pans. Now for the caramel. Half a pound of chocolate, one and a half pounds of sugar, quarter of a pound of butter, one teacupful of cream, or rich milk; boil ten or twelve minutes; add a teaspoonful of vanilla. When nearly cold, spread between layers of the cake, as you would jelly, sift powdered white sugar over the top, and it is done. It surpasses fruit cake, equals cocoa-nut cake, and puts pound cake to the blush.

Cake (Cocoa-nut).—Take two cupfuls of sugar, four eggs, two tablespoonfuls of butter, half a cupful of sweet milk, one teaspoonful of soda, two of cream tartar, and two cupfuls of flour. Beat yolks, sugar and butter to a cream; beat the whites of the eggs, and add the last thing before baking. Bake in five layers. Take one tablespoonful of corn starch, make as for starch by pouring on boiling water,

until it thickens; sweeten, flavor, spread between the layers when cold, and sprinkle on cocoa-nut; also spread over the top of the cake.

Cake (Buffalo Cream).—One cup of sugar, one tablespoonful of butter, one egg, two-thirds cup of sweet milk, one and two-thirds of flour, and two teaspoonfuls of baking powder.

Cream for Cake.—Half a pint of sweet milk, two eggs, two tablespoonfuls of sugar, one teaspoonful of starch, two tablespoonfuls of flour and flavor to taste. Scald the milk, beat the eggs (yolks and whites separately), sugar, starch and flour together, boil until it forms a custard, and spread between the layers.

Cake (Cup).—One cupful of butter, two of sugar, three and a half of flour, one of milk, five eggs—the whites of two being left out—one teaspoonful of cream of tartar, and one-half a teaspoonful of soda or one-half of baking powder. Beat the butter to a cream. Add the sugar, gradually, then the eggs, well beaten, the milk, next the flour, in which the soda and cream of tartar have been mixed. Bake in two sheets for thirty minutes in a moderate oven. The frosting is made of the white of one egg, one teaspoonful of powdered sugar, one tablespoonful of lemon juice. Put the white of an egg in a bowl, add the sugar by degrees, beating with a spoon; When all has been added, stir in the lemon juice. If the egg is large use a full cup of sugar, and if small, a scant cupful.

Cake (Cream).—Two eggs, two tablespoonfuls of water, two teaspoonfuls of baking powder stirred in a cup of flour, stir two-thirds of a cup of sugar into the well beaten yolks and add water and flour, then whites beaten stiff, bake in two pie tins eight or ten minutes. This never fails, and is excellent for jelly cake.

Cream.—One egg, one-half cup of sugar, small piece of butter, one-half pint of milk, when boiling add one tablespoonful of corn starch previously stirred in cold milk, stir till free from lumps. Be careful not to scorch. When cool, flavor and spread between the layers. Set in a damp, cool place.

Cake (Sponge).—Beat two eggs in a coffee cup until light, and then fill the cup with sweet cream; add one cup of sugar, one-half teaspoonful of soda, one of cream of tartar, and one and one-half cup of flour. Should sour cream be used, omit the cream of tartar.

Cake (Corn Starch).—One cup of sugar, one and one-fourth of a cup of butter, beat to a cream, add two eggs, one-half cupful of corn starch, two teaspoonfuls of baking powder, a half cupful of milk, one cupful of flour.

Cake (Every Day).—One-half cup of butter beaten with one cup of (brown or white) sugar, add one cup of sour or buttermilk, one teaspoonful of soda stirred in the milk, one teaspoonful of cassia and nutmeg, two cups of flour, and one large cup of raisins chopped and rolled in flour. Bake slowly.

Cake—without eggs.—Two-thirds cup of sugar, one-third cup of butter, two-thirds cup of sweet milk two cups of flour, one teaspoon-

ful of cream of tartar, and one-half teaspoonful of soda. Flavor to taste. This does very well when eggs are forty cents a dozen, and not to be found at that.

Cake (Fig).—Three-quarters cup of butter, two cups of sugar, one-half cup of milk, three cups of pastry flour, the whites of six eggs, one teaspoonful of baking powder, one of the essence of lemon. Mix in the usual way and bake in the sheets the same as for Washington pies. The filling is made of one cupful of stoned raisins chopped very fine, one pound of figs boiled half an hour and chopped with the raisins, one large cup of sugar, the juice of one lemon. This well mixed is to be spread between the sheets of cake. Before stoning the raisins, scald them, and they will stone much easier. If there is any water left after boiling the figs use it in chopping them.

Cake (Fruit).—Two cups of brown sugar, two cups molasses, one and a half cups of butter, one cup of milk, one and a half cups of currants, half cup of citron, six cups flour, one tablespoonful of cloves, one tablespoonful of cinnamon, one nutmeg, one tablespoonful of brandy, half a teaspoonful of soda, five eggs.

Cake (Hickory-nut).—One and a half cups of sugar, three eggs, one cup of raisins, one cup of hickory-nut meats, one teaspoonful of soda, two of cream tartar, and enough flour to make stiff batter.

Cake (Imperial).—One pound of flour, one pound of butter, one pound of sugar, one pound of raisins, one pound of almonds, bleached, three quarters of a pound of citron, one glass of brandy, one tablespoonful of mace, eight eggs.

Cake (Lemon-jelly).—Take one potato, boil and mash perfectly smooth, add to it two large spoonfuls of butter, one teacupful of sugar, the beaten yolks of eight eggs, flavor with lemon; line small patty pans with pastry, fill with a large spoonful of above mixture, and bake.

Cake (Marble).—*Light part.*—Whites of three eggs, one-half cup of butter, one-half cup of sugar, one-half cup of milk, two cups of flour, one-half teaspoonful of soda, one teaspoonful of cream of tartar.

Dark part.—Yolks of three eggs, one cup of molasses, one-half cup of butter, two cups of flour, one teaspoonful of soda, one-third cup of milk, and flavor with mixed spices, cloves, cinnamon, nutmeg. Butter the tin and put in the pan alternate layers of light and dark parts, having the light part on top.

Cake (Sponge).—Materials: four eggs, two even cups of sugar, three-fourths cup of hot water, one and three-fourth cups of flour, even measure, two teaspoonfuls of baking powder, salt, flavor with lemon. Beat the eggs separately. To the yolks gradually add the sugar. Mix well. Then add hot water. Mix the baking powder with the flour and add part of the flour, then part of the well beaten whites and so on until all is used. Flavor. It will be thin but do not add any more flour, for it is all right. Bake in a moderately quick oven. When just right this is equal to any dozen-egg sponge cake I

ever eat. To please the children bake some of the sponge cake very thin, cut in shape like dominoes, frost and mark the line and dots with a camel's hair brush dipped in chocolate. Another notion is to write their names on little frosted cakes with a brush dipped in the yolk of an egg.

Cakes (Sugar).—One pint dry flour, one-half pint of butter, one-half of sugar, mix the flour and sugar, rub in the butter, add an egg beaten with enough milk to moisten the whole; roll thin and bake in a quick oven. This recipe is for those who have few eggs or none.

Cakes (Scotch).—Scotch cakes are economical so far as eggs are concerned, and, if made with care, will melt in the mouths of children. To one pound of flour allow half a pound of butter, and a quarter of a pound of sugar; let the butter stand in a basin near the fire to soften, but not melt; when soft, rub it and the flour together; then knead in the sugar. Roll out in a sheet half an inch thick; cut out cakes about two inches square; bake until they are of light brown. Put them away in a stone jar, and they will in a day or two gather moisture enough to be soft.

Cake (Spice).—One and one-half cup of sugar, two-thirds cup butter, one cup raisins seeded, two-thirds cup sweet milk, three cups flour, two eggs, one heaping teaspoonful cream tartar, one-half even spoonful soda, or two teaspoonfuls baking powder, cinnamon, nutmeg, and cloves to taste.

Cakes (Tea.)—The following recipe for tea cakes is highly prized by New England housekeepers of "ye olden time:" One and a half pounds of sugar, half a pound of butter, one pound of flour, half a grated nutmeg, half a pint of milk, one teaspoonful saleratus. Rub the butter and sugar to a rich cream and work in a little of the flour and the nutmeg and beat it smooth. Dissolve the saleratus in the milk and strain it into the above. Add the rest of the flour and work to a dough stiff enough to roll out. If too thin, add flour; if too thick, use more milk. Roll half an inch thick, cut into round cakes, place them on buttered tins and bake in a very quick oven.

Cakes (Rye Tea).—One pint of sweet milk, two eggs, a teaspoonful of light brown sugar, a saltspoonful of salt, and two tablespoonfuls of baking powder. Add to these sufficient rye flour to form a batter about the consistence of ordinary griddle cake batter. Bake in buttered gem-pans in a quick oven.

Cakes (Rice.)—Cook the rice thoroughly in a farina kettle, and while still quite warm, mould it into round cakes flattened; this to be done the previous day or evening. In the morning dip them into beaten egg, and fry in hot lard or drippings, until of a delicate brown. They are very palatable to eat with meats, or with sugar and cream if thus preferred. The coating of egg keeps them firm, prevents too much fat penetrating, and adds to their good taste and nutritiousness.

Cake (Walnut).—One coffee cupful of sugar, one cupful and a half of flour, two cupfuls of raisins, one cupful of walnut meats, half a

cupful of butter, half a cupful sweet milk, three eggs, half a nutmeg, half a teaspoonful of soda or two teaspoonfuls of baking powder; flavor with lemon or vanilla.

Cake (Pork).—One pound of salt fat pork chopped very fine, pour over this, half a pint of boiling water, when nearly cold add one pound of chopped raisins, one-fourth pound of citron, two cups of sugar, one cup of molasses, one teaspoonful of soda, one nutmeg, two teaspoonfuls of cloves, two teaspoonfuls of cinnamon, flour to make quite stiff, bake slow.

Caked Udder of Cow.—For swollen or caked udder or bag of a cow, wash and rub thoroughly with water as hot as you can bear your hand. Then rub with a dry cloth. Then apply hog's lard, or what is better, grate good yellow carrot fine and simmer it in the lard to an ointment and apply and rub as above.

Calves—treatment of.—The calf is made or marred the first five months. The general practice through the country, after the calf is one or two months old, is to turn it out and let it fight the flies the whole season. The farmer is very busy. He may come in late at night and the calf is forgotten or stunted. Never turn your calf out the first year. Keep it in the stable, and you will find the animal growing satisfactory. Instead of a little yearling, you will have a big, fine two-year-old.

Calves—to make drink.—Let the calf suck the cow two or three days, or until the milk is good. This is better for the cow, and gives the calf a good start, then in the morning with a strap or rope tie it up in some good place, it is now full fed and comfortable; then at night approach the calf quietly, with your pail of milk, back it into a corner, stand by its right side, get your fingers into its mouth, set your pail where you can reach it, and with your right hand pour some milk into the calf's mouth, it will soon begin to suck your fingers. Continue to pour in milk until it will follow your fingers to the milk in the pail, now with a little care you can keep it from putting its nose to the bottom of the pail and blowing milk from its nostrils. Now you can, by degrees, work your fingers out of its mouth, but if you do so too soon it will probably take up its head and look for a teat, when you will have to give it your fingers and repeat the process. I have never failed of feeding a calf by this plan, and frequently have them drink the second feed without my fingers.

Calico—to wash.—Infuse three gills of salt in four quarts of water. Put in the calico while the solution is hot, and leave until the latter is cold. It is said that in this way the colors are rendered permanent and will not fade by subsequent washing.

Callas—treatment of.—For blooming callas, I use the soil from the hennery, and on cold mornings I pour hot water in the saucers; I have had a bloom from every bulb. As my fuchsias never grew very large, I put in fresh soil and then used some fine manure from the hennery, and before spring it covered the window, with every shoot in full bloom.

Camphor—and its uses—Camphor is not a very steady stimulant, as its effect is transitory; but in large doses it acts as a narcotic, abating pain, and inducing sleep. In moderate doses it operates as a diaphoretic and anti-spasmodic, increasing the heat of the body, allaying irritation and spasm.

It is used externally as a liniment when dissolved in oil, alcohol, or acetic acid, being employed to allay rheumatic pains; and it is also useful as an embrocation in sprains, bruises, chilblains, and, when combined with opium, it has been advantageously employed in flatulent colic and severe diarrhœa, being rubbed over the bowels.

When reduced to a fine powder by the addition of a little spirit of wine and friction, it is very useful as a local stimulant to indolent ulcers, especially when they discharge a foul kind of matter; a pinch is taken between the finger and thumb and sprinkled into the ulcer, which is then dressed as usual.

When dissolved in oil of turpentine, and a few drops are placed in a hollow tooth and covered with jewellers' wool, or scraped lint, it gives almost instant relief to toothache.

Used internally, it is apt to excite nausea, and even vomiting, especially when given in the solid form.

As a stimulant it is of great service in all low fevers, malignant measles, malignant sore throat, and running small-pox; and when combined with opium and bark, it is extremely useful in checking the progress of malignant ulcers and gangrene.

As a narcotic it is very useful, because it allays pain and irritation, without increasing the pulse very much.

When powdered and sprinkled upon the surface of a blister, it prevents the cantharides acting in a peculiar and painful manner upon the bladder.

Combined with senna it increases its purgative properties; and it is also used to correct the nausea produced by squills, and the irritating effects of drastic purgatives and mezereon.

Dose—From four grains to one scruple, repeated at short intervals when used in small doses, and long intervals when employed in large doses.

Caution—When given in an over-dose it acts as a poison, producing vomiting, giddiness, delirium, convulsions, and sometimes death.

Camphor Tablets.—Melt tallow, and add a little powdered camphor and glycerine, with a few drops of oil of almonds to scent. Pour in moulds and cool.

Camphor Ice.—Spermaceti, one and one-half ounces; gum camphor, three-quarters of an ounce; oil sweet almonds, four tablespoonfuls; set on the stove in an earthen dish till dissolved; heat just enough to dissolve it. When warm pour into small moulds, if desired to sell; then paper, and put into tinfoil; used for chaps on hands or lips.

Canaries—care of.—Never put canaries in a painted cage, as they will pick the wires and thus imbibe poison. Brass wire cages are

more cheerful than those made of wood, and can be easily kept clean.

Give them fresh seed, pure water, both for drinking and bathing, cuttlefish, and, in their season; fresh lettuce and chick-weed. Cake is hurtful.

To keep the cage clean, a piece of brown paper covering the bottom is a great assistance, as it can be replaced every morning. Newspaper must never be used, because they may pick at the ink.

After bathing take out the bath. If it stands all day it becomes impure; and the birds are better bathers if the dish is furnished at a regular time.

Keep the perches clean, as you can easily do, by rubbing them with sand-paper. Be careful not to frighten the birds in any way. Give them a little fresh sand every day.

Supply fresh air and plenty of sunshine; but guard them from drafts and excess of heat. The noon sunshine should not fall directly on the cage.

Baker's sponge cake dipped in sherry wine is strongly recommended for sick canary birds that have been moulting. The bird will no doubt eat sparingly of it, but the remedy is excellent. It has been known in many instances to restore the voice and health of canaries after shedding eighteen months and two years. Birds often continue moulting from weakness, and a short time feeding them on the cake and sherry, in connection with their seed, soon shows a beneficial effect. I would also advise not to give the bird any greens to eat, nor apples, while in the condition described.

Canaries having asthma are relieved and sometimes cured by giving them a pap made of baker's bread boiled in sweet milk. In very bad cases remove their seed for a few days and let them feed entirely upon it. The following treatment completely restored a fine singer which I had quite despaired of, as he had been sick and silent for months: Leave off seed entirely. Make a paste of sweet milk and bread crumbs, throw the crumbs into the milk while boiling, and stir until quite smooth; add a pinch of Cayenne pepper, varied occasionally by some finely-minced clove or garlic; dissolve in the drinking water a little black currant jelly, a bit of fig, or half a potash lozenge. I used all of these and my bird is well; so to which the preference should be given I know not, though I incline to the jelly. It may take a long time to cure the bird, and if the trouble arises from hardness of the tongue, it must be painted daily with strong borax-water. If he sneezes a little olive-oil must be gently put up the nostrils. He should have plenty of tepid water to bathe in, celery, sweet apple, or lettuce. But by no means hang him close to the window, the cold is too severe, even in a moderately warm room, for a bird in delicate health. Paste must be fresh daily.

Canaries—to remove red mites from.—Put into the cage as a perch one or more hollow sticks, with holes cut into them at short distances as in a cane pipe. The insects crawl into these, and can easily be knocked or shaken out, or destroyed by letting hot water

run through the sticks. This should be done every day till the bird is relieved. Hang a piece of new white flannel in the cage at night next the perch so that it shades the bird from the light. In the morning you will find the mites on the flannel; wash, or put in a new piece the following night, and continue doing so until they are all removed. It is also well to scald the cage. The perches should be of red cedar wood.

Cancer—cure for.—The following is said to be a sure cure for cancer: A piece of sticking plaster is put over the cancer, with a circular piece cut out of the center, a little larger than the cancer, so that the cancer and a small circular rim of healthy skin next to it is exposed. Then a plaster, made of chloride of zinc, blood root and wheat flour, is spread on a piece of muslin, the size of this circular opening, and applied to the cancer for twenty-four hours. On removing it, the cancer will be found burned into, and appear of the color and hardness of an old shoe sole, and the circular rim outside of it will appear white and parboiled, as if scalded by hot steam. The wound is now dressed and the outside rim soon separates, and the cancer comes out in a hard lump, and the place heals up. The plaster kills the cancer, so that it sloughs like dead flesh, and never grows again. The remedy was discovered by Dr. King, of London, and has been used by him for several years with unfailing success, and not a case has been known of the reappearance of the cancer when this remedy has been applied.

Cancer—cure.—Take the blossoms of red clover and make tea of them, and drink freely. It will cure cancer in the stomach as well as on the surface.

Candied Lemon Peel.—Peel some fine lemons, with all the inner pulp, in halves or quarters; have ready a very strong syrup of white sugar and water; put the peels into it, and keep them boiling till the syrup is nearly reduced. Take them out and set them to dry with the outer peel downward.

Candied Orange Peel.—Make a very strong syrup of white sugar and water; take off the peels from several oranges in halves or quarters, and boil them in the syrup till it is nearly reduced. After this take them out and set them to dry with the outer skin downward.

Candy (Vanilla).—Three teacups of white or coffee sugar, one and a half teacups unskimmed sweet milk to dissolve it; boil till done, and flavor with vanilla; after it cools a little, stir until hard and eat when you please.

Candy—for colds.—Boil one and one-half pounds of sugar in a half-pint of water, till it begins to candy round the sides; put in eight drops of essence; pour it upon buttered paper, and eat it with a knife.

Candy (Home Made).—All children are fond of candy, and if pure, a moderate amount is not injurious. In these days of adulteration, that made at home is the safest to give them. It is a simple matter to make chocolate caramels; all that is needed is one cup of sweet milk, one cup of molasses, half a cup of sugar, half a cup of grated choco-

late, a piece of butter the size of a walnut; stir constantly and let it boil until it is thick, and turn it out upon buttered plates; when it begins to stiffen mark it in squares so that it will break readily when cold. Cocoanut caramels are made of two cups of grated cocoanut, one cup of sugar, two teaspoonfuls of flour, the whites of three eggs beaten stiff; bake on a buttered paper in a quick oven.

Candy (Almond).—Take one pound of sugar and about half a pint of water; put in part of the white of an egg to clarify the sugar; let this boil a few minutes, and remove any scum that rises. When the sugar begins to candy drop in the dry almonds; first, however, you should blanch the nuts by pouring hot water over them, and letting them stand in it a few minutes; then the skin will slip off readily. Spread the candy on buttered plates to cool.

Candy (Butter Scotch).—One pound of C sugar, three ounces of butter, put in a stew.pan or kettle, and stir often to prevent burning. Try a little in water; if brittle it is done. Pour out on the top of a buttered pan and mark in squares.

Candy (Cream).—To three pounds of loaf sugar add one-half pint of water, and set it over a slow fire for half an hour; then add a teaspoonful of gum arabic dissolved, and a tablespoonful of vinegar. Boil it till it is brittle, then take it off, and flavor with vanilla, rose, or orange. Rub the hands with sweet butter, and pull the candy till it is white; then twist or break it, or stretch it out into thin white strips, and cut it off.

Candy (Fig).—Take one pound of sugar and one pint of water; set over a slow fire. When done add a few drops of vinegar and a lump of butter, and pour into pans in which split figs are laid.

Candy (Raisin).—Raisin candy can be made in the same manner as fig candy, substituting stoned raisins for the figs. Common molasses candy is very nice with all kinds of nuts added.

Candy (Lemon).—Boil a pound and a half of sugar in a half pint of water till it begins to candy round the sides; put in eight drops of essence of lemon. Pour it upon buttered paper and cut it with a knife.

Candy (Molasses).—West India molasses, one gallon; brown sugar, two pounds; boil the molasses and sugar in a preserving kettle over a slow fire; when done enough it will cease boiling; stir frequently, and when nearly done, stir in the juice of four lemons or two teaspoonfuls of essence of lemon; afterward butter a pan, and pour out.

Candles (Adamantine).—Melt together ten ounces mutton tallow; camphor, one-quarter ounce; beeswax, four ounces; alum, two ounces.

Candles (Lard).—Dissolve one-quarter pound alum and one-quarter pound saltpeter in one-half pint water on a slow fire; then take three pounds of lard cut into small pieces, and put into this pot with this solution, stirring it constantly over a very moderate fire until the lard is all dissolved; then let it simmer until all steam ceases to rise

and remove it at once from the fire. If you leave it too long it will be discolored. These candles are harder and better than tallow.

Candles (Imitation Wax).—Purify melted tallow by throwing in powdered quick-lime, then add two parts wax to one of tallow, and a most beautiful article of candle, resembling wax, will be the result. Dip the wicks in lime water and saltpeter on making. To a gallon of water add two ounces saltpeter and one-half pound of lime; it improves the light, and prevents the tallow from running.

Candle—to last all night.—When, as in a case of sickness, a dull light is wished, or when matches are mislaid, put powdered salt on the candle till it reaches the black part of the wick. In this way a mild and steady light may be kept throughout the night by a small piece of candle.

Cane Chair Bottom—to restore.—Turn the chair bottom upward, and with hot water and sponge wash the cane work well, so that it is well soaked; should it be dirty, use soap; let it dry in the air, and it will be as tight and firm as new, provided none of the canes are broken.

Caramels—to make.—1. Lemon caramels are made by grating the yellow rind of a lemon with a lump of sugar; add to this a few drops of lemon juice, with water enough to dissolve the sugar completely, and stir the whole into a boiled syrup a few minutes before it is taken from the fire.

2. Orange and lime caramels are prepared in the same manner from these respective fruits.

3. Coffee caramels: coffee, two ounces; sugar, one pound. Make an infusion of the coffee, using as little water as possible; strain it through a cloth, and stir it gradually into the boiled syrup a few minutes before taking it from the fire.

4. Chocolate caramels: chocolate, four ounces; sugar, one pound. Dissolve the chocolate in as little water as possible, and add it to the boiled sugar, as in the coffee caramels.

5. Vanilla and orange cream caramels are made by using the respective essences of these fruits.

Caramels (Cocoa-nut, etc.)—Cocoa-nut candy is made by taking two pounds of sugar to an ordinary cocoa-nut. Add the milk of the cocoa-nut to the sugar, with a little water if the milk is less than a small teacupful, Stew until it ropes when poured from a spoon, then stir in the cocoa-nut, which you should have already grated, and pour into buttered pans. When cool break into pieces—a process which will be facilitated if, when the candy is cool, but not cold, you score it half through with a knife. Any nut candy can be made in the same manner by substituting nut kernels for the grated cocoanut. For cream candy allow a cupful of rich cream to three pounds of sugar, and stew until the syrup candies when dropped into cold water. Then flavor with vanilla, lemon, or what you like, and pour into buttered pans to cool, or pull the candy as you prefer. Another recipe for cream candy, without the cream, requires two cups of gran-

ulated sugar, half a cup of water, a piece of butter the size of a walnut, two tablespoonfuls of vinegar and two teaspoonfuls of vanilla. Do not stir while boiling. When done pour on buttered plates, and when cold pull it until white.

Card-case for a Watch.—Take two pieces of card ten inches long and three and one-half inches wide, and cut the ends pointed. Cover both pieces with velvet or silk, and embroider a vine of flowers on one end, or if preferred, paint in water colors. Overhand the two pieces together and finish the edge with gilt cord. Make a ring of twisted cord at the top. Bend the card up at three inches to form the rack, and fasten at the sides with cord and tassels. Twist a large hook with gilt wire and sew an inch below the ring at the top, for the watch.

Carminative (Dalby's).—Magnesia, three drams; oil peppermint, three drops; oil nutmeg, seven drops; oil anise, nine drops; tincture of castor, one and one-half drams; tincture of assafœtida, forty-five drops; tincture of opium, eighteen drops; essence pennyroyal, fifty drops; tincture of cardamons, ninety-five drops; peppermint water, seven ounces; mix.

Carnations—from cuttings.—Carnations are easily rooted from slips. Take off the small side shoots when about two inches long. If your plants are in pots, plant them around the edge, pressing the soil very firmly about the portion inserted. Do not water them only when the parent plant requires it. If they are cultivated in the ground, plant them in the same bed, taking the same precaution to make the earth compact about the slips, so they will not dry up instead of rooting. If the ground is slightly moist, it is enough for them, but if very dry sprinkle occasionally.

Carpets—to clean.—A few drops of carbonate of ammonia put into a small quantity of warm rain water will prove a safe and easy anti-acid, and will change, if carefully applied, discolored spots upon carpets, and indeed all spots whether produced by acids or alkalies. If you have a carpet injured by whitewash this will immediately restore it.

Carpets—to put down.—All housekeepers understand the difficulty of putting down carpets, and especially where they require considerable stretching. All people have not carpet stretchers, so I will give you a plan within reach of all, which is far better, as there is no danger of tearing the carpet. Tack one end of the carpet down firmly; then put on a pair of common rubbers, step short, lift your feet as little as possible from the carpet and scuff across to the opposite side, and stand still while somebody nails it for you. You will be astonished at the ease and quickness with which your work is accomplished, no matter how much stretching your carpet requires. See that the rubbers are not worn too smooth upon the bottoms.

Carpets—to cleanse—The following mixture is recommended for taking grease out of carpets: Aqua ammonia, two ounces; soft water, one quart; saltpetre, one teaspoonful; shaving-soap, one ounce, finely

scraped. Mix well, shake and let it stand a few hours or days before using, to dissolve the soap. When used pour on enough to cover any grease or oil that has been spilled, sponging and rubbing well and applying again if necessary; then wash off with clear cold water. It is a good mixture to have in the house for many things; is sure death to bed-bugs if put in the crevices which they inhabit; will remove paint where oil was used in mixing it, and will not injure the finest fabrics.

Carpets—to remove ink from.—Take up as much as possible with a spoon, pour cold sweet milk upon the spot and take up with a spoon until the milk is only faintly tinged with ink, then wash with cold water and wipe dry. The writer has in this way removed nearly half a pint of ink from a delicate cream-colored carpet without leaving a stain.

Carpet (faded)—to restore.—Dip the carpet in strong salt and water. Blue factory cotton, or silk handkerchiefs will not fade if dipped in salt water while they are new.

Carpets—to renovate.—To one pail of warm water add one pint of ox-gall; dip a soaped flannel into the mixture, and rub well the surface of the carpet, piece by piece, rinsing it as you proceed with clean, cold water, taking care not to make the carpet too wet, and finish off by rubbing with a dry coarse cloth. The carpet, of course, must be well beaten before it is operated upon. This process is simply and surprisingly effective in renovating the colors. The only drawback is the effluvium given off by the gall; but this is soon remedied by exposure to the air, or by opening the windows if the carpet be laid down.

Carpet—to patch.—If you have an old carpet badly worn, cut a patch to cover the holes, taking care to match figure or stripe perfectly, paste it on with flour paste and iron on very tight with a hot iron.

Carpets—to brighten.—A slightly damp cloth rubbed over a dusty carpet brightens it wonderfully and gathers all the dust. This is an excellent way to cleanse the floor of an invalid's room where noise and dust are objectionable. Carpets should be thoroughly beaten on the wrong side first, and then on the right, after which spots may be removed by the use of ox-gall or ammonia and water.

Carpet (Rag)—to make.—While a smooth, tasteful and not too heavy rag carpet is a treasure in the farmhouse dining or sitting-room, if we are to have carpets there at all, the loose, homely, and above all the rough and heavy rag carpet, is an abomination anywhere. To insure the former, care must be taken in preparing the rags. First, they must be sorted and washed clean, then cut or torn finely and evenly. Old calico must have most width; old white cotton should be a trifle narrower; flannel a little narrower still, while old broadcloth or full cloth must be cut or torn very fine. The rags should all be as nearly as possible of the same size when beaten up.

A carpet in which great care is taken in this particular looks much less "rag carpety" than if the rags are carelessly cut or torn.

Next the sewing must be well done, so there will be no loose ends or corners left to fly up in weaving or sweeping, as this makes a carpet exceedingly rough and homely. If there is much thick cloth among the rags, and one desires an extra nice carpet, it is better to clip a bit off from the side of the ends of the thick rags, so as to lessen the bunch where sewed together. The extra work of doing this is not noticeable, and the carpet is much smoother and finer looking when done.

Whether or no the carpet has a pleasing effect to the eye depends greatly on the taste of the maker and weaver in the arrangement of colors. Many a housekeeper who has spent weeks of hard labor upon a carpet has felt greatly disappointed and chagrined when it was brought home from the weaver's, because, after all her labor in cutting, sewing and coloring, it presented so unsatisfactory an appearance, often, indeed, being almost an eyesore from its gaudy look, the inharmonious grouping of colors, or some other similar defect.

Before beginning a carpet one should decide on the general tone of it; that is, what the groundwork of color shall be. If brown, the greater part of the rags should be of various shades of brown; the warp also being of the same or of some color that will mingle and harmonize pleasantly with the rags. The bright rags must be such as will either harmonize or contrast agreeably with the rest. The warp should be fine, well twisted, laid moderately thick in the reed, or in weaver's phrase, be "thick-sleyed," and be well stretched in weaving. If this is done and the rags are well beaten up, the carpet will be fine and firm, the dust will sweep off instead of sweeping through, and it will sweep easily and wear well.

Carrots—for chickens.—"I feed between twenty and thirty bushels of carrots and beets to my fowls every winter. The best way to feed them is to boil them until quite soft, mush them in the water they were boiled in, and for laying hens put in enough shorts and wheat bran to make a stiff mass. For fattening fowls thicken with corn and barley meal. Feed the scraggiest old biddy that ever walked on this mixture for two weeks and she will be as plump as an alderman. And where chickens intended for the early spring market have not been well fed from the start, ten or twelve days on the carrot and barley mixture will help them wonderfully. An occasional feed on raw carrots is greatly relished by fowls during cold weather."

Carrots (Wild)—to destroy.—The carrot is one of the most troublesome weeds with which the farmer has to contend. It is so hardy and prolific, that, in some of the states, laws have been passed for its suppression. If neglected it will spread over pastures and meadows, and take possession of the roadsides. They do not show themselves much in the early part of the season, but after the mowing in June and July, they shoot up rapidly, and show their white blossoms in every direction. Some farmers seek to destroy them by pulling

them up by the roots, an effectual, but very expensive process. The plant is biennial, and if it is not permitted to scatter its seeds it can just as surely be eradicated by mowing, while in blossom, or any time before it drops its seeds. There is little danger of leaving it until August or early in September. If cut before seeding, the plants may be left upon the ground. If later, gather into heaps and burn, or put into a compost heap.

Carriages—care of.—On the authority of the *Carriage Monthly*, more injury is done to carriages and wagons by greasing too much, than the reverse. Tallow is the best lubricant for wood axles, and castor oil for iron. Lard and common grease are apt to penetrate the hub, and work their way out around the tenons of the spokes and spoil the wheel. For common wood axles, just enough grease should be applied to the spindle to give it a light coating. To oil an iron axle, first wipe clean with a cloth wet with turpentine, and then apply a few drops of castor oil near the shoulder and end. One teaspoonful is enough for the wheels. Carriages are sometimes oiled so much that their appearance is spoiled by having the grease spattered upon their varnished surfaces. When they are washed in that condition, the grease is sure to be transferred to the chamois from the wheel, and from thence on to the panels.

Carriage-tops—care of.—Enamel leather tops should be first washed with castile soap and then warm water, then oiled with neat's-foot oil; or sweet oil and a coat of enamel varnish put on, the leather will look like new. Dashes may be cleaned in the same manner, but varnish color is not very beneficial to patent leather; however, when old and cracked, it may be colored to improve the appearance.

Cashmere (Black)—to cleanse.—To clean black cashmere, wash in hot suds in which a little borax has been placed. Rinse in bluing water—very blue—and iron while damp. If carefully done the material will look equal to new.

Cast-iron Vessels—to mend.—Drill a hole at each extreme end of the crack, to prevent its further extension, plug-rivet the holes with copper, and, with fine iron filings saturated with urine, caulk the crack. Four parts of pulverized clay and one part of iron filings made into a paste with boiling linseed oil and applied hot is a good cement for the same purpose.

Castor Oil—to administer.—If it is necessary to administer castor oil to a child there is no need of sickening him by forcing him to take it clear. Put a little cold water in a wine glass, then drop the oil in; it will form one large globule; have the child wet his mouth with water, and then drink from the wine glass rapidly, keeping his mouth closed for a minute or two after, and he will never know by the taste what he has taken. Even cod-liver oil can be taken in this way, and the patient need never be disturbed by the taste.

Castor Oil—to make palatable.—Boil castor oil with an equal quantity of milk, sweetened with a little sugar. Stir it well and let it

cool. Another good way is to beat the castor oil with the white of an egg until both are thoroughly mixed. In either case the taste of the oil cannot be distinguished.

Castor Oil—to make.—To make common castor oil, take pale vegetable oil, one gallon; castor oil, three gallons; mix. If a less quantity is wanted, use a proportionate amount of each.

Catarrh—cure for.—The smoke of mullein leaves has long been considered as a specific for catarrh. It will doubtless, in many cases, alleviate, if it does not cure. The leaves should be thoroughly dried, and then used as tobacco in a pipe. The smoke should be pressed in the back of the mouth and exhaled through the nose; once or twice a week will suffice, and should be persevered in. If properly cured there will not be an acrid exudation. A little piece of sponge in the bowl of the pipe will prevent the juice from passing to the mouth.

Catarrh—remedy for.—A medical authority asserts that the severest catarrh cold can be removed in about ten hours by a mixture of carbolic acid, ten drops; tincture of iodine and chloroform, each fifteen drops. A few drops of the mixture should be heated over a spirit lamp in a test tube, the end of which should be applied to the nostrils as volatilization is effected. The operation should be repeated in about two minutes, when, after the patient sneezes a number of times, the troublesome symptoms rapidly disappear.

Catarrh—cure.—A most unfailing remedy for catarrh is to smoke crushed cubeb berries in a clay pipe and swallow the smoke. They can be procured at any drug store, at a moderate cost.

Catarrh—specific.—Take dry bloodroot and reduce it to powder; mix it with gum camphor. Use it as a snuff. It is said to be a certain cure.

Catarrh—treatment of—Prepare creosote water, in any amount, at the rate of one drop of wood creosote to one gill of water (four drops to the pint), or a little more water if the creosote be very strong and the water too irritating. Make a fresh mixture once in two or three days, and as much oftener as more is needed. Take a handful of this water, previously well shaken, and snuff it through the nose into the mouth, and eject it. A little going down the throat will do no harm. Do this two or three times, and repeat it at bedtime, in the morning on rising, and, if need be, occasionally during the day. In fact, keep the nasal passages washed out with the creosote water. Its vapor will even penetrate the bony cavities, and also be drawn into the lungs with useful results. It destroys the purulent mucus, and tends to prevent its further secretion. It is useful for any discharges from the nose or lungs produced by colds or general weakness. For bronchitis, and especially for catarrh, good rare cooked beef or other nourishing food, and quinine if needed, to obtain and retain a vigorous system, are capital aids to the creosote or any other medicine.

Catsup (Tomato.)—Cut one peck of ripe tomatoes in halves, boil them in a lined saucepan until the pulp is all dissolved, then

strain them well through a hair-sieve and set the liquor on to boil, adding one ounce of salt, one ounce of mace, one tablespoonful of black pepper, one teaspoonful of red pepper, one tablespoonful of ground cloves, five of ground mustard; let them all boil together for five or six hours, and stir them most of the time. Let the mixture stand eight or ten hours in a cool place, add one pint of vinegar, and then bottle it; seal the corks and keep in a cool, dark place.

Cattle—salt and water for.—"I often hear advice given to salt cattle often. Now, I believe that cows should have salt at least once a week—twice is really not too often—but care should also be taken that they have access to water. My experience is that salt, unless soon followed by water to dilute it, has injurious effects. It produces alone a fever in the stomach, and creates a burning thirst which is bad for the animal."

Cauliflower—to cook.—Pick off the leaves and cut the stalk close to the bottom of the bunch of flowers, and lay in cold water for half an hour. Unless very large do not cut it; if you do, quarter it neatly. Tie a close net of coarse bobbinet lace or tarlatan about it to prevent breaking or bruising; put into boiling water salted, and cooked until tender. Undo and remove the net, and lay the cauliflower in a hot dish. Have ready a large cupful of nice drawn butter and pour over it. Cut with a silver knife and fork in helping it out, and give a little of the sauce to each person. Take it out of the water as soon as it is done, serve quickly, and eat hot. It darkens when standing.

Cauliflower—to pickle.—Choose such as are firm, yet of their full size; cut away all the leaves, and pare the stalk, pull away the flowers by bunches, steep in brine two days, then drain them; wipe them dry and put them into hot pickle; or merely infuse for three days three ounces of curry powder in every quart of vinegar.

Cement (Alabaster).—1. Finely powdered plaster of Paris made into a cream with water. 2. Melt yellow resin, or equal parts of yellow resin and beeswax; then stir it in half as much plaster of Paris. The first is used to join and fit together pieces of alabaster or marble, or to mend broken plaster figures. The second is used to join alabaster, marble, porphyry and any similar substances that will bear being heated. It must be applied hot, and the stone must be made warm. Many stones may also be joined by heating them sufficiently to melt a lump of sulphur, with which their edges must then be smeared, after which they must be placed together, and held so until cold. Little deficiencies, as chips out of the corners, etc., may be filled up with melted sulphur or bleached shellac, colored to any shade, as required.

Cement (Acid Proof).—How to make paste or cementing material that is proof against acid fumes—like those given off in the preparation of silver nitrate, for instance—is well worth knowing. Finely powdered glass, mixed with soluble silicate of soda, will give a material of this description.

Cement—for aquaria.—One part, by measure, say a gill of litharge

one gill of plaster of Paris, one gill of dry, white sand, one-third of a gill of finely powdered resin. Sift, and keep corked tight until required for use, when it is to be made into a putty by mixing in boiled oil (linseed) with a little patent drier added. Never use it after it has been mixed (that is, with the oil) over fifteen hours. This cement can be used for marine as well as fresh water aquaria, as it resists the action of salt water. The tank can be used immediately, but it is best to give it three or four hours to dry.

Cement—to mend china.—Take a very thick solution of gum arabic, and stir into it plaster of Paris, until the mixture is of proper consistency. Apply it with a brush to the fractional edges of the chinaware, and stick them together. In a few days it will be impossible to break the article in the same place. The whiteness of the cement renders it doubly valuable.

Cement—for joining china or glass.—1. Isinglass, one ounce; distilled vinegar, five and a half ounces; spirits of wine, two ounces; gum ammoniac, one-half ounce; gum mastic, one-half ounce. Mix well and keep in a bottle tightly corked.

2. Soak a little fine isinglass in water until it is quite soft, then dissolve it in proof spirit, stirring in a little resin varnish.

3. Take rough Russian isinglass, soak in sufficient water to make it soft, then dissolve it in proof spirit, and add a little resin varnish.

Cement—Egyptian.—For mending china, glass or woodenware, take one pound of the best white glue, one-half pound dry white lead, one quart soft water, one-half pint alcohol; put the three articles in a dish, and that dish in a pot of boiling water; let it boil until dissolved, then add the alcohol and let it boil again until mixed. A little camphor should be added to preserve it and disguise its composition.

Cement—to fasten leather on top rollers.—Gum arabic, two and three-quarter ounces; isinglass two and three-quarter ounces; dissolve each separately in water, and mix.

Cement (Glycerine).—Professor Hirzel has discovered an important use of glycerine. When glycerine is mixed with fine and well dried litharge, it yields a cement that is capable of a large number of applications. All metals and nearly all solid bodies can be bound together by this cement. It is said to harden under water as readily as in the air, and to resist a temperature of five hundred degrees. It is especially recommended for such pieces or apparatus as are exposed to the action of chlorine, hydrochloric acid, sulphuric acid, sulphurous acid, and nitric acid; also the vapor of alcohol, ether, and bisulphide of carbon, as none of these agents act upon it. The cement can be used in steam engines, pumps, foundations for machinery, and finally, as a substitute for plaster in galvano-plaster and electro-plating. The preparation of glycerine and litharge to be taken must depend somewhat on the consistency of the cement, and its proposed uses. An excess of glycerine would retard the setting, as it does not readily evaporate.

Cement (Gutta Percha).—This highly recommended cement is made by melting together, in an iron pan, two parts common pitch, and one part gutta percha, stirring them well together until thoroughly incorporated, and then pouring the liquid into cold water. When cold it is black, solid and elastic; but it softens with heat, and at one hundred degrees Fahrenheit is a thin fluid. It may be used as a soft paste, or in the liquid state, and answers an excellent purpose in cementing metal, glass, porcelain, ivory, etc. It may be used instead of putty for glazing windows.

Cement (Japanese).—Immediately mix the best powdered rice with a little cold water, then gradually add boiling water until a proper consistency is acquired, being particularly careful to keep it well stirred all the time; lastly, it must be boiled for a minute in a clean saucepan or earthen pipkin. This glue is beautifully white and almost transparent, for which reason it is well adapted for fancy paper work, which requires a strong and colorless cement.

Cement (Jewelers' Armenian).—Isinglass soaked in water and dissolved in spirit, two ounces (thick); dissolve in this ten grains of very pale gum ammonia (in tears) by rubbing them together, then add six large tears of gum mastic, dissolved in the least possible quantity of rectified spirits. When carefully made, this cement resists moisture and dries colorless. Keep in a closely stopped phial.

Cement (Jewelers').—Put in a bottle two ounces of isinglass and one ounce of the best gum arabic, cover them with proof spirits, cork loosely, and place the bottle in a vessel of water, and boil it till a thorough solution is effected, then strain it for use.

Cement—for petroleum lamps.—Boil three parts of resin with one part of caustic soda and five of water. The composition is then mixed with half its weight of plaster of Paris, and sets firmly in one-half to three-quarters of an hour. It is of great adhesive power, not permeable to petroleum, a low conductor of heat, but not superficially attacked by hot water.

Cement—for kerosene oil lamps.—The cement commonly used for fastening the tops on kerosene lamps is plaster of Paris, which is porous and quickly penetrated by the kerosene. Another cement which has not this defect is made with three parts of resin, one of caustic soda, and five of water. The composition is mixed with half its weight of plaster of Paris. It sets firmly in about three-quarters of an hour, and is said to have great adhesive power, not permeable to kerosene, a low conductor of heat, and not superficially attacked by water.

Cement—to withstand heat and moisture.—Pure white lead or zinc-white ground in oil and used very thick is an excellent cement for mending broken crockery ware; but it takes a very long time to harden. It is well to put the mended object in some store-room, and not to look after it for several weeks, or even months. It will then be found so firmly united that, if ever again broken, it will not part on the line of the former fracture.

Cement—for sealing bottles, etc.—Mix three parts of resin, one of caustic soda, and five of water, this composition is then mixed with half its weight of plaster of Paris. The compound sets in three-quarters of an hour, adheres strongly, is not permeable like plaster used alone, and is attacked only slightly by warm water.

Cement—for general use.—One of the most useful cements for general use, is made by melting together two parts of common pitch and one part of pure (not vulcanized or manufactured) gutta percha. When thoroughly mixed, pour into cold water, and make up into convenient sticks. There are few articles that this will not unite and hold, when the color is not objectionable, and the article is not to be heated.

Cement—for broken marble.—Take gum arabic one pound; make into a thick mucilage; add to it powdered plaster of Paris, one and a half pounds; sifted quick lime, five ounces; mix well; heat the marble and apply the mixture.

Cement—for glass.—A good and durable cement for repairing glass is made by dissolving fine glue in acetic acid until a thin paste is formed. The articles to be mended should be perfectly clean, as the least bit of greasy substance on the broken edges will prevent it from sticking.

Cement—for china, etc.—An excellent cement for mending china articles when broken can be made by mixing flour with white of egg to the consistency of a paste. Hot water does not injure, but rather hardens this simple cement.

Cement—for stoves, etc.—Wood ashes and common salt, made compact with water, will stop the cracks of a stove, and prevent the smoke from escaping.

Cement—to mend leaky boilers.—Powdered litharge, two parts; very fine sand, two parts; slaked quick lime, one part. Mix all together. To use, mix the proper quantity with boiled linseed oil and apply quick. It gets hard very soon.

Cement (Turner's).—Beeswax, one ounce; resin; one-half ounce; pitch, one-half ounce; melt, and stir in fine brick dust.

Cement (White).—Take white (fish) glue, one pound and ten ounces; dry white lead, six ounces; soft water, three pints; alcohol, one pint. Dissolve the glue by putting it in a tin kettle or dish containing the water, and set this dish in a kettle of water to prevent the glue from being burned. When the glue is all dissolved put in the lead and stir and boil until it is thoroughly mixed; remove from the fire, and when cool enough to bottle add the alcohol, and bottle while it is yet warm, keeping it corked.

Cement—for mending earthenware.—Grate a pound of old cheese with a bread-grater, into a quart of milk, in which it must be left for a period of fourteen hours. It should be stirred quite often. A pound of unslacked lime, finely pulverized in a mortar, is then added and the whole is thoroughly mixed by beating. This done, the whites of twenty-five eggs are incorporated with the rest and the whole is

ready for use. There is another cement for the same purpose which is used hot. It is made of resin, beeswax, brick-dust, and chalk boiled together. The substances to be cemented must be heated, and when the surfaces are soaked with cement, they must be rubbed hard upon each other, as in making a glue joint with wood.

Cement (Soft)—for steam-boilers, steam-pipes, etc.—Red or white lead, in oil, four parts; iron borings, two to three parts.

Cement (Hard.)—Iron borings and salt water, and a small quantity of sal-ammoniac, with fresh water.

Cement—for gasfitters'.—Mix together resin, four and one quarter parts; wax, one part, and Venetian red, three parts.

Cement—for plumbers'.—Black resin, one part; brick-dust, two parts, well incorporated by a melting heat.

Cement—for coppersmiths'.—Boiled linseed oil and red lead mixed together into a putty, are often used by coppersmiths and engineers to secure joints; the washers of leather or cloth are smeared with this mixture in a pasty state.

Cement—for holes or cracks.—Red lead ground in oil, six parts; white lead, three parts; oxide of manganese, two parts; silicate of soda, one part; litharge one-half part; all mixed and used as putty.

Ceilings—to decorate.—A country house may oftentimes be so prettily decorated as to be a joy to its possessor, and a home not in the least behind city homes in tasteful arrangement. In fact, so many more people in the country own their homes than do city people, that it seems almost as if they, as a matter of course, must take a pride in decorating and adorning them. We will not speak of roofs and verandas and vines, etc., which all come outside, and concerning which the male members of the family must be more or less consulted before change can be made, but of the internal arrangements of the wall and woodwork and ceiling. Generally, we find the plain, white-washed ceiling in the country house. But it is no more needful there than in the city. It can be painted any color which contrasts well with the woodwork and paper of the walls. Then with a stepladder, paint, brush, and stencil-plate, any lady can decorate her ceiling to suit herself. If she feels that she has not the skill—though it does not take much—she can purchase exceedingly pretty paper for the ceiling, designed in artistic patterns and colors, for moderate cost. This, however, needs care in putting on, that it may be straight and smooth, and the pattern not twisted awry. I think the paint and stencil-plate far easier to manage, and if a simple design has been chosen it ought not to be considered a very great task to put it on.

Ceilings (Smoky)—to clean.—Ceilings that have been smoked by a kerosene lamp should be washed off with soda water. Grained wood should be washed with cold tea.

Celery Cream.—Cut celery into very small pieces, rejecting the toughest green portions. Add only water enough to keep it from burning, and boil it in a closely covered vessel for an hour, or until perfectly tender. Then add a sufficient quantity of milk, first thick-

ened with a tablespoonful of flour to each pint, previously rubbed smooth with two tablespoonfuls of butter, and salt and pepper to the taste, very little of the pepper. Boil and serve as soon as the flour is thoroughly cooked. If made moderately thin with the milk, flour, and butter, it can be rubbed through a colander, when it gives a delicious, cream-like soup. Smooth squares of bread well browned are frequently put into the soup when finished. A bowl of this, eaten with bread, the same as bread and milk, makes an excellent noon lunch.

Celery (Stewed).—The celery is washed and cut up in pieces of an inch or less. For this, stalks that are not thoroughly bleached, and which would be rejected by those who eat it raw, may be used. That which is imperfectly bleached is stronger than that which is white throughout, but any unpleasant flavor is driven off in the cooking. The celery is covered with water, and allowed to stew gently until thoroughly soft. If there is too much water for the sauce, pour off the excess, add a generous lump of butter, and flour, stirred first in a little cold water, enough to make a sauce about as thick as cream, add salt, if needed, and pepper, if desired. Those who try this will be quite sure to repeat it.

Celery Soup.—Cut celery small and stew it until it is very soft. It is then to be rubbed through a sieve or colander to separate the fibres. This celery pulp is added to a good stock—a plain soup made from meat, with only salt as a seasoning, slightly thickened, and seasoned with pepper, etc. This is the usual celery soup as met with at restaurants. It is better if made with milk. We are not aware of any definite proportion; the celery pulp is thinned with milk; flour stirred up with butter is added to slightly thicken it, and salt and pepper are used as seasoning. A small lump of sugar will greatly improve it. Serve very hot.

Celery—a medicine.—Celery boiled in milk and eaten with the milk served as a beverage, is said to be a cure for rheumatism, gout, and a specific in case of small-pox. Nervous people find great comfort in celery.

Chalk—uses of.—Chalk, when prepared by washing, becomes an astringent as well as antacid.

It is used internally in diarrhœa, in the form of mixture, and externally as an application to burns, scalds, and excoriations.

Dose of the mixture from one to two ounces.

Chamois Skin—to clean.—Chamois may be cleaned in a solution of weak soda and warm water; rub plenty of soft soap into the leather, and allow it to remain in soak for two hours, then rub it well until it is quite clean. Afterward rinse it well in a weak solution composed of warm water, soda, and yellow soap. If rinsed in water only, it becomes hard, when dry, and unfit for use. The small quantity of soap left in the leather allows the finer particles of the leather to separate and become soft like silk. After rinsing, wring it well in,

a rough towel and dry quickly; then pull it about and brush it well, and it will become softer aud better than most new leather.

Chamois Leather—to cleanse.—Dirty wash leather is frequently thrown aside and wasted for the want of knowing how to clean it. Make a solution of weak soda and warm water, rub plenty of soft soap into the leather and allow it to remain in soak for two hours, then rub it well until it is quite clean. Afterward rinse it well in a weak solution composed of warm water, soda, and yellow soap. It must not be rinsed in water only, for then it would be so hard, when dry, as to be unfit for use. It is the small quantity of soap left in the leather that allows the finer particles of the leather to separate and become soft like silk. After rinsing wring it well in a rough towel and dry quickly, then pull it about and brush it well, and it will become softer and better than most new leather. In using a rough leather to touch up highly polished surfaces, it is frequently observed to scratch the work; this is caused by particles of dust, and even hard rouge, that are left in the leather, and if removed by a clean, rough brush it will then give the brightest and best finish, which all good workmen like to see on their work.

Chamomile Tea—tonic.—Into a common china teapot put about twenty-five good sized chamomile flowers, and pour over them one pint of boiling water. Let the infusion stand half an hour; then pour it off into a wine bottle, and, if desired, sweeten it with a little sugar or honey. It is best unsweetened; a wineglass should be taken three times a day before eating.

Chamomile—and its uses.—The flowers of the chamomile are tonic, slightly anodyne, anti-spasmodic, and emetic.

They are used externally as fomentations, in colic, face-ache, and tumors, and for unhealthy ulcers.

They are used internally in the form of infusion, with carbonate of soda, ginger, and other stomachic remedies, in dyspepsia, flatulent colic, debility following dysentery, and gout.

Warm infusion of the flowers acts as an emetic; and the powdered flowers are sometimes combined with opium or kino, and given in intermittent fevers.

Dose: Of the powdered flowers, from ten grains to one dram, twice or thrice a day; of the infusion, from one to two ounces, as a tonic, three times a day; and from six ounces to one pint, as an emetic; of the extract, from five to twenty grains.

Champagne—for hot weather.—To four parts of seltzer water add one ounce of Moselle wine, or hock, and put a teaspoonful of powdered sugar into a wineglassful of this mixture; an ebullition takes place and you have a sort of champagne which is more wholesome in hot weather than the genuine wine known by that name.

Chandelier—to renew.—To renew a dusty and discolored chandelier, apply a mixture of bronze powder and copal varnish. The druggist where they are purchased will tell you in what proportion they should be mixed.

Chapped Hands.—When one's hands are chapped, he is always more or less liable to absorb poisonous matter into his system—in the handling, say, of putrid meat, or in the washing of clothes from a sick-room, or dressing some foul sore. Where the surface oil is sufficient, it is apt to be washed off, especially with warm water, faster than it is secreted. But the difficulty is greatly increased by the alkali (soda or potash) of the soap, which not only takes up the oil, but actually eats through the epidermis. The best help for chapped hands is, having washed them thoroughly before retiring, to rub them over with mutton tallow and wear through the night a pair of easy-leather gloves. Persons in whom the tendency to chap is not so strong, may keep their hands in condition by an occasional resort to this treatment.

Chapped Hands—treatment of.—Mix quarter pound unsalted hog's lard, which should be washed first in hot water, and then in rose-water, with the yolk of a new-laid egg and a large spoonful of honey. Add to this as much fine oatmeal or almond paste as will make the whole into a paste, and apply this after washing the hands.

Charcoal—to make.—Make a foundation of earth with a slightly convex surface slightly raised above the natural surface, drive a long, stout stake down in the middle, and round this pile the wood cut into lengths of three feet or so. When the heap is finished cover the pile with two inches of dry earth, covered with sod, grass side in. The stake may then be drawn out, and the cavity filled with shavings and chips. The hole in the top must be closed as soon as the fire is fairly started. Ventilating spaces must be left at the base till the fire is well established.

Charlotte Russe.—1. Take one-fifth of a package of gelatine and one half a cupful cold milk: place in a farina boiler and stir gently over the fire until the gelatine is dissolved; pour into a dish and place in a cool room; take one pint of rich cream and whisk it with a tin egg-beater until it is thick; flavor the cream with either vanilla or wine, and sweeten to taste; when the gelatine is cool strain carefully into the prepared cream; line a mould with lady fingers; then pour the cream in carefully until it is filled; cover with lady fingers and ice the top if you desire it.

2. A simple but delicious charlotte russe is made as follows: One pint of sweet cream, sweetened and flavored to taste; one and one-half ounces of Cox's gelatine, whites of three eggs; dissolve the gelatine in a little milk and add it to the cream, let it stand until quite cold, then add the whites of the eggs beaten very stiff. Line your moulds with long strips of sponge cake or lady fingers and fill with the above mixture.

Checks.—Bank checks are orders drawn by individuals or firms on a bank or banker, payable either to "bearer" or to "order." When payable to "bearer" they are usually paid to the holder on presentation; if to "order," although properly endorsed, strangers cannot draw money on them without being identified.

All checks must be presented within a reasonable time.

A creditor is not bound to take a check in payment of debt.

Cheese—coloring for.—The coloring for cheese is, or at least should be, Spanish annatto; but, as soon as coloring became general in this country, a color of an adulterated kind was exposed for sale in almost every shop. The weight of a guinea and a half of real Spanish annatto is sufficient for a cheese of fifty pounds' weight. If a considerable part of the cream of the night's milk be taken for butter, more coloring will be requisite. The leaner the cheese is, the more coloring it requires. The manner of using annatto is to tie up in a linen rag the quantity deemed sufficient, and put it into one-half pint of warm water over night. This infusion is put into the tub of milk in the morning with the rennet infusion; dipping the rag into the milk, and rubbing it against the palm of the hand as long as any color runs out. The yolk of egg will color butter.

Cheese—to keep from mould.—Dissolve a spoonful of bruised pepper, two teaspoonfuls of salt, and the same quantity of boracic acid in a quarter of a pint of brandy for a few days; then filter the fluid through a cloth and dilute with an equal quantity of water. Some of the preparation is introduced into the cracks of the cheese by means of a feather, or better with a small glass syringe. If places which have been nibbled by mice are rubbed with the liquid no mould will form. It will put "jumpers" to flight.

Cheese—from veal.—Take out the bone from a shoulder of veal, and cut it into small pieces; stew till tender in a very little water. Remove all pieces of gristle, and chop very fine; then return to the same liquor it was boiled in; add one pound of cold boiled pork, chopped very fine, one spoonful of salt, one teaspoonful each of pepper and mace, a variety of sweet herbs, and two well-beaten eggs; cook ten minutes, then pour all into an earthen dish, cover with a plate, and bake one hour, To be sliced and eaten cold.

Cherry Pectoral (Ayer's).—Take four grains of acetate of morphia; two fluid drams of tincture of bloodroot; three fluid drams each of antimonial wine and wine of ipecacuanha, and three fluid ounces of syrup of wild cherry. Mix.

Chewing Gum.—Take of prepared balsam of tolu, two ounces; white sugar, one ounce; oatmeal, three ounces; soften the gum in water bath and mix in the ingredients; then roll in finely powdered sugar or flour to form sticks to suit.

Chickens—to fatten.—The birds must be shut up; the pen or cage must not be too large, and it should not be tight and close. For a dozen birds a coop three feet wide or deep, four feet long and two and a half feet high is large enough. The whole coop may properly be made of slats, except the roof. The floor should be so made as to allow the droppings of the birds to fall through. Birds that will agree peacably only should be cooped together in a fattening-pen. If one is cross and masterful, turn him or her out, and keep the fattening ones quiet. Give as much food as they will eat up clean, in a trough

or basket in front of the cage, and give water after the feed is eaten. As a change, give some sand or gravel, or powdered charcoal, once a day. Keep the coop out in an airy place, but not where cold winds will blow through it. Feed rather sparingly than otherwise the first two or three days; afterward give as much as they will eat. This continued for two weeks should give you good, fat fowls; if they are not fat something is wrong, and they should be let out. Fowls will fatten after two weeks' feeding, but they will not be so good to eat. Three weeks is long enough, if all is right.

Chicken (Broiled).—Split the chicken open on the back and then flatten with a cleaver; lay in a dripping-pan with the inside of the chicken next to the pan; bake one hour and baste occasionally; when done make a gravy with the giblets and a little butter and brown flour.

Chicken (Curried).—Cut a chicken into pieces, season and fry in butter. Slice an onion and fry in butter, add a teacupful of stock and tablespoonful of curry powder mixed with a little flour and rubbed smooth with a little stock; salt; boil five minutes.

Chicken Cholera—cure.—For chicken cholera mix a good supply of salts in the dough when feeding. Keep plenty of fresh water and a clean house for them.

Chickens—to cure gapes in.—This very common and fatal complaint in chickens may readily be cured by giving them small pills of dough thoroughly impregnated with soft soap.

Chickens (Young)—food for.—a writer in the *Poultry Yard*, who believes that chickens are often injured by corn meal, would not let them have corn in any form until they are three or four weeks old, unless it be a little scalded or cooked meal, fed occasionally; and the principal food should be stale bread crumbled fine or moistened with milk, with wheat screenings (when they get old enough to eat), scalded oatmeal, and cottage cheese, made from sour milk. This is not a very expensive method of feeding, as the chickens, being so small, will not consume much of it daily, while the best results have invariably followed such a system of feeding and management. It is far better to go to a little extra expense than to stand the chance of losing a number of valuable birds.

Chicken-Pox.—This is a harmless but an annoying disease. As it resembles modified small-pox, or varioloid, the doctor should be called upon to decide which it is. Keep the patient in the house, and other children away.

Chicken Lice—to destroy.—The first signs of lice are with early setting hens. From their nest soon a whole house will be overrun with the pests. Chicks show the presence of lice very quickly, and lice are certain death to them if they are not protected. Have all nests movable, and change the contents frequently. With sitting hens' nests be sure to have the nest clean and the box and surroundings whitewashed before she is placed. Whitewash and the dust box are the surest preventives of lice. Put two or three coats of white-

wash on every interior spot in the building; the lice harbor in the crevices of the rough sidings, and on the under side of the perches. Let the fowl house have a dust box. Mix hot ashes with the dust occasionally to dry it. Do all this early in the year, before spring laying and sitting. Kerosene and lard when applied is a sure cure, but they are too often dangerous in their effects. A little castor oil on the head and under the wings of sitting hens is very effective. Don't keep a brood hen in a little coop without a dust wallow. If you want your fowls to be free from lice you must keep their habitation clean. The best way to do that is by occasional change of the nest contents and thorough whitewashing of the apartment.

Chicken—for tea.—Boil a chicken (or chickens) in as little water as possible, until the meat falls from the bones. Chop the meat fine, and season with salt and pepper. Put into the bottom of a mold some slices of hard boiled eggs then a layer of the chopped chicken, another of egg, then chicken, until the mold is nearly full. Boil down the water in which the chicken was cooked, with a large pinch of gelatine moss, until about a cup and a half full is left; season, and strain through a very coarse net and pour over the mould of chicken. Let it stand over night or all day near the ice. To be sliced down for supper, and garnished with celery-tops or parsley.

Chilblains—to cure.—Wear boots which do not hurt the feet, and go without stockings. This is an almost certain cure, as we know from observation in many cases. The feet recover their tone of health slowly, but surely and permanently. The sweating of the feet caused by stockings, especially thick, woolen ones, and the retention of this sweat aggravates the disease, and so does the irritation of the skin caused by the wool. It is remarkable how comfortable the feet are in boots when there are no socks around them. The lotions, salves, and ointments used for chilblains are of little use.

Chilblains—remedies.—1. Glycerine, one ounce; carbolic acid, one-half a dram; mix and apply night and morning. If the suffering is severe, soak the feet every night in a tea made of white oak bark. This remedy is said to be infallible.

2. Slice raw potatoes with the skins on, and sprinkle over them a little salt, and as soon as the liquid therefrom settles in the bottom of the dish, wash with it the chilblains. One application is all that is necessary.

3. In the evening, before retiring, take salt and vinegar made as hot as can be borne on the parts affected; bathe with a small cloth, and do so until cured.

4. An unfailing remedy for chilblains: A solution of thirty grains of permanganate of potassa in an ounce of pure water, to be applied thoroughly with brush or swab, or in the form of a poultice.

5. Dissolve one ounce of white vitriol in a pint of water. Bathe the parts affected very often.

Children's Diseases—treatment of.—In the case of a baby not yet being able to talk, it must cry when it is ill. The colic makes a

baby cry loud, long and passionately, and shed tears, stopping for a moment and beginning again.

If the chest is effected, it gives one sharp cry, breaking off immediately, as if crying hurt it.

If the head is effected, it cries in sharp, piercing shrieks, with low moans and wails between. Or there may be quiet dozing, and startings between.

It is easy enough to perceive, where a child is attacked by disease that there is some change taking place; for either its skin will be dry and hot, its appetite gone; it is stupidly sleepy, or fretful and crying; it is thirsty, or pale and languid, or in some way betrays that something is wrong. When a child vomits, or has a diarrhœa, or is costive and feverish, it is owing to some derangement, and needs attention. But these various symptoms may continue for a day or two before the nature of the disease can be determined. A warm bath, warm drinks, etc., can do no harm, and may help to determine the case. On coming out of the bath, and being well rubbed with the hand, the skin will show symptoms of rash, if it is a skin disease which has commenced. By the appearance of the rash, the nature of the disease can be learned. Measles are in patches, dark red, and come out first about the face. If scarlet fever is impending, the skin will look a deep pink all over the body, though mostly so about the neck and face. Chicken-pox shows fever, but not so much running at the nose, and appearance of cold, as in measles, nor is there so much of a cough. Beside, the spots are smaller, and do not run much together, and are more diffused over the whole surface of the skin, and enlarge into little blisters in a day or two.

Let the room where the child is sick be shady, quiet, and cool. Be careful not to speak so suddenly as to startle the half-sleeping patient and handle it with the greatest tenderness when it is necessary to move it. If it is the lungs that suffer, have the little patient somewhat elevated upon the pillows for easier breathing, and do everything to soothe and make it comfortable, so as not to have it cry, and to thus distress its inflamed lungs. If the child is very weak, do not move it too suddenly, as it may be startled into convulsions. In administering a bath, the greatest pains must be taken not to frighten the child. It should be put in so gradually, and so amused by something placed in the water on purpose as to forget its fear; keep up a good supply of fresh air, at a temperature of about sixty-six degrees Fahrenheit. If a hired nurse must be had, select if possible a woman of intelligence, gentle and loving disposition, kind and amiable manners, and of a most pacific, unruffled and even temper. If a being can be got possessed of these angelic qualities, and we believe there are many such, you will be quite safe in intrusting to her care the management of your sick child, or yourself either, in case of sickness. She should not be under twenty-five or over fifty-five, as between these two ages she will, if healthy, be in her full strength and capacity.

Children Teething—ice for.—The pain of teething may be almost

done away, and the health of the child benefitted, by giving it fine splinters of ice, picked off with a pin, to melt in its mouth. The fragment is so small that it is but a drop of warm water before it can be swallowed, and the child has all the coolness for its feverish gums without the slightest injury. The avidity with which the little things taste the cooling morsel, the instant quiet which succeeds hours of fretfulness, and the sleep which follows the relief, are the best witnesses to this magic remedy. Ice may be fed to a three months' child this way, each splinter being no larger than a common pin, for five or ten minutes, the result being that it has swallowed in that time a teaspoonful of warm water, which, so far from being a harm, it is good for it, and the process may be repeated hourly as often as the fretting fits from teething begin.

Chili Sauce.—Twelve large ripe tomatoes, one large onion, four red peppers; chop all together fine; two cups of sugar, one tablespoonful of salt, one tablespoonful of vinegar, one teaspoonful each of ground allspice and cloves. Boil until quite thick, then bottle and seal.

Chimney—to extinguish a fire in.—So many serious fires have been caused by chimneys catching fire, and not being quickly extinguished, that the following method of doing this should be made generally known: Throw some powdered brimstone on the fire in the grate, and then put a board or something in the front of the fire-place, to prevent the fumes descending into the room. The vapor of the brimstone ascending the chimney, will then effectually extinguish the soot on fire. Should a fire break out in a chimney, a wetted blanket should be nailed to the upper ends of the mantle-piece, so as to cover the opening entirely, when the fire will go out of itself.

Chimney—to clean.—To clean a chimney, place a piece of zinc on the live coals in the stove. The vapor produced by the zinc will carry off the soot by chemical decomposition. Those who have tried the process claim that it will work every time.

Chintz—to wash so as to preserve its gloss and beauty.—Take two pounds of rice and boil it in two gallons of water till soft; when done, pour the whole into a tub, let it stand till about the warmth you in general use for colored linens; put the chintz in, and use the rice instead of soap; wash the chintz in this till the dirt appears to be out; then boil the same quantity as above, but strain the rice from the water, and mix it in warm water. Wash it in this till quite clean; afterward rinse it in water the rice was boiled in. This will answer the end of starch, and no wet will effect it, as it will be stiff while it is worn. If a gown, it must be taken to pieces, and when dried, hang it as smooth as possible; after dry, rub it with a smooth stone, but use no iron.

China—to mend.—China may be mended by a paste made of the white of egg, mixed with flour. The article so mended will not hold water, but for vases, lamp-shades, and similar purposes, answers a good purpose, and is handy.

Chip Dirt—for fruit trees.—Many farmers do not know that they have a mine of wealth—a small one—in the very dooryard. Chip dirt is the very best material to mix with the soil in setting out young trees. It is full of the elements of plant food and retains moisture. If you are setting out a new orchard plow up and utilize the soil from the old wood-pile.

Chloral—uses of—dangerous.—An experienced physician says that anybody who continually uses chloral as a sleeping draught is sure to be killed by it in the long run, certain conditions of the physical nature making it a deadly poison.

Chloride of Lime—a disinfectant.—This is very useful to counteract disagreeable smells and as a disinfectant. It should be put into small earthen pans, and set where needed. Of course, it will require occasional renewing.

This useful disinfectant should be kept in every house to purify a sick-room, and to remove all unpleasant smells. Tainted garments may be rendered harmless by sprinkling them with a weak solution of it; and a piece of sponge dipped in this solution and held to the nose will enable any one with comparative safety to enter a foul sewer.

Chlorine Pastiles—for disinfecting the breath.—1. Dry chloride of lime, two drams; sugar, eight ounces; starch, one ounce; gum tragacanth, one dram; carmine, two grains. Form into small lozenges.

2. Sugar flavored with vanilla, one ounce; powdered tragacanth, twenty grains; liquid chloride of soda sufficient to mix; add two drops of any essential oil. Form a paste and divide into lozenges of fifteen grains each.

Chocolate Drops.—Scrape chocolate to powder, and add pounded sugar in the proportion of two ounces of chocolate to one pound of sugar; make it into a paste with clean water; put it into a stew-pan with a lip to it, not more than three-parts filled, and place it over a hot plate, stirring it with a spoon; when it almost boils, take it from the fire and continue to stir it, till it is of a proper consistence. Have ready a clean smooth tin plate, and on this drop the chocolate. It is a good plan to regulate the falling of the drops from the lip of the pan by means of a small piece of wire; when cold, remove the drops with a knife. If there is any danger of sticking, rub the tin plate lightly over with a rag that has been wet with sweet oil.

Choking—ways to relieve.—1. Do not lose an instant. Force the mouth open with the handle of a knife or of a long spoon; push the thumb and fingers deep down into the throat beyond the root of the tongue, and feel for the foreign body. If the obstruction cannot be grasped, a hair-pin bent into a hook and guided by the left hand will often bring it out. If this fails, get some one to press against the front of the chest or support it against the edge of a table, and strike several hard, quick blows with the open hand on the back, between

the shoulder blades. Further treatment must be applied by a physician, who should have been immediately sent for.

2. To prevent choking, break an egg into a cup and give it to the person choking, to swallow. The white of the egg seems to catch around the obstacle and remove it. If one egg does not answer the purpose, try another. The white is all that is necessary.

3. A smart blow with the flat of the hand on the back, just below the neck, will often relieve the windpipe. If it does not, send for the doctor at once.

4. Foreign bodies lodged in the throat can be removed by forcibly blowing into the ear. The plan is so easily tried and so harmless that we suggest its use.

Cholera—rules for the prevention of.—We urge the necessity, in all cases of cholera, of an instant recourse to medical aid, and also under every form and variety of indisposition; for all disorders are found to merge in the dominant disease.

Let immediate relief be sought under disorder of the bowels especially, however slight. The invasion of cholera may thus be readily prevented.

Let every impurity, animal and vegetable, be quickly removed to a distance from the habitations, such as slaughter-houses, pig-sties, cess-pools, necessaries, and all other domestic nuisances.

Let all uncovered drains be carefully and frequently cleansed.

Let the grounds in and around the habitations be drained, so as effectually to carry off moisture of every kind.

Let all partitions be removed from within and without habitations, which unnecessarily impede ventilation.

Let every room be daily thrown open for the admission of fresh air; this should be done about noon when the atmosphere is most likely to be dry.

Let dry scrubbing be used in domestic cleaning in place of water cleaning.

Let excessive fatigue, and exposure to damp and cold, especially during the night, be avoided.

Let the use of cold drinks and acid liquors, especially under fatigue, be avoided, or when the body is heated.

Let the use of cold acid fruits and vegetables be avoided.

Let excess in the use of ardent and fermented liquors and tobacco be avoided.

Let a poor diet, and the use of impure water in cooking, or for drinking, be avoided.

Let the wearing of wet and insufficient clothes be avoided.

Let a flannel or woolen belt be worn round the belly.

Let personal cleanliness be carefully observed.

Let every cause tending to depress the moral and physical energies be carefully avoided. Let exposure to extremes of heat and cold be avoided.

Let crowding of persons within houses and apartments be avoided.

Let sleeping in low or damp rooms be avoided.

Let fires be kept up during the night in sleeping or adjoining apartments, the night being the period of most danger from attack, especially under exposure to cold or damp.

Let all bedding and clothing be daily exposed during winter and spring to the fire, and in summer to the heat of the sun.

Let the dead be buried in places remote from the habitation of the living. By the timely adoption of simple means such as these, cholera or other epidemic will be made to lose its venom.

Cholera Infantum—remedy for.—Toast a half slice of stale bread very brown, break in a goblet and fill with water; put in as much soda as you can hold on a three cent piece; let the little one drink a little at a time. If the stomach is very irritable, give only a teaspoonful at a time. In some cases, with the advice of a physician put in a teaspoonful of paregoric in the gobletful.

Cholera—Egyptian cure for.—Best Jamaica ginger root bruised, one ounce; cayenne, two teaspoonfuls; boil all in one quart of water to one-half pint, and add loaf sugar to form a thick syrup. Dose, one tablespoonful every fifteen minutes, until vomiting and purging ceases; then follow up with a blackberry tea.

Cholera—Indian prescription for.—First dissolve gum camphor, one quarter ounce, in one and one-half ounce of alcohol; second, give a teaspoonful of spirits of hartshorn in a wine glass of water, and follow it every five minutes with fifteen drops of the camphor in a teaspoonful of water, for three doses; then wait fifteen minutes, and commence again as before; and continue the camphor for thirty minutes, unless there is returning heat. Should this be the case, give one more dose, and the cure is effected; let them perspire freely (which the medicine is designed to cause), as upon this the life depends, but add no additional clothing.

Cholera Tincture (Isthmus).—Tincture of rhubarb, cayenne, opium, and spirits of camphor, with essence of peppermint, equal parts of each, and each as strong as can be made. Dose, from five to thirty drops, or even to sixty, and repeat, until relief is obtained, every five to thirty minutes.

Cholera Morbus—a certain cure.—The ingredients are: One glassful of West India rum, one glassful of molasses, one glassful of spring water, and three tablespoonfuls of ginger. Mix them together and take it. It is said to afford immediate relief.

Cholera Remedy.—Spirits of wine, one ounce; spirits of lavender, one-quarter ounce; compound tincture of benzoin, half an ounce; oil of origanum, one-quarter ounce; twenty drops on moist sugar. To be rubbed outwardly also.

Cholera Mixture.—Confection aromatic, one dram; prepared chalk, one dram; powdered gum arabic, one dram; pimento-water, two ounces; pure water, four ounces; laudanum, forty drops.—Dose: A grown person to take two tablespoonfuls for the first dose, and one

tablespoonful after every motion. Dose for a child between five and ten years of age, one teaspoonful.

Cholagogue (India).—Quinine, twenty grains; Peruvian bark, pulverized, one ounce; sulphuric acid, fifteen drops, or one scruple of tartaric acid is best; brandy, one gill; water to make one pint; dose, five teaspoonfuls every two hours, in the absence of fever; an excellent remedy.

Chowder (Fish).—Fry a few slices of salt pork, dress and cut the fish in small pieces, pare and slice the potatoes and onions, then place them in the kettle, a layer of fish, then of the fried pork, potatoes, onions, etc., seasoning each layer with salt and pepper. Stew over a slow fire thirty minutes.

Chromos—to mount.—Take common bleached muslin, heavily starched is best, make a thick flour paste, cook till clear, then strain. Saturate the cloth with the paste, lay the chromo on the cloth face up, turn over and smooth out all the wrinkles and air-puffs. Have a stretch-frame prepared of the proper size made of three-eighths inch soft wood, mitered and well nailed. Lay the chromo on the frame—back on frame. Commence in center of frame and drive a tack on each side, drawing the chromo moderately tight. Then alternate from side to side, driving a tack on each side one and one-half inches from last tack, drawing the canvas gently, but not too tight, both sidewise and endwise of the frame; this obviates the difficulty of puckering on the corners. The end is not so particular, only to draw quite tight. If it is not smooth when first finished, it will be all right when it dries. You can then varnish with best white varnish after it is dry.

Cider Barrels—to cleanse.—Pour in lime water, and then insert a trace chain through the bung hole, remembering to fasten a strong cord on the chain so as to pull it out again. Shake the barrel until all the mold inside is rubbed off. Rinse with water, and finally pour in a little whisky.

Cider (Sour)—to sweeten and keep.—To keep cider perfect, take a keg and bore holes in the bottom of it; spread a piece of woolen cloth at the bottom; then fill with clean sand closely packed; draw your cider from a barrel just as fast as it will run through the sand; after this put in clean barrels which have had a piece of cotton or linen cloth two by seven inches dipped in melted sulphur and burned inside of them, thereby absorbing the sulphur fumes (this process will also sweeten sour cider); then keep it in a cellar or room where there is no fire, and add half a pound of white mustard seed to each barrel. If cider is long made or souring when you get it, about one quart of hickory ashes, or a little more of other hard wood ashes, stirred into each barrel will sweeten and clarify it nearly equal to rectifying it as above; but if it is not rectified, it must be racked off to get clear of the pomace, as with this in it, it will sour. Oil or whisky barrels are best to put cider in, or a half pint of sweet oil to a barrel, or a gallon of whisky to a barrel, or both, may be added with decidedly good

effects; isinglass, four ounces to each barrel, helps to clarify and settle cider that is not to be rectified.

Cider—to keep sweet.—Pure sweet cider that is arrested in the process of fermentation before it becomes acetic acid or even alcohol and with the carbonic acid gas worked out, is one of the most delightful beverages. When the saccharine matters by fermentation are being converted to alcohol, if a bent tube be inserted air tight into the bung with the other end into a pail of water, to allow the carbonic acid gas evolved to pass off without admitting any air into the barrel, a beverage will be obtained that is fit nectar for the gods.

A handy way is to fill your cask nearly up to the wooden faucet when the cask is rolled so the bung is down. Get a common rubber tube and slip it over the end of the plug in the faucet, with the other end in the pail. Then turn the plug so the cider can have communication with the pail. After the water ceases to bubble, bottle or store away.

Cider—to keep.—To one pound of cider add two pounds of sugar; put up the cider in glass or stoneware; by no means in wood. After filling the vessels, save enough to keep them full and leave open and keep full until it quits working, then cork up. In three or four months it will be good wine, and the older the better. If at any time you wish fresh cider, take a half glass of said wine, add as much water and sweeten to suit taste, and the best judges will think it just from the press.

Cider (Nectar).—One quart cider, one bottle soda water, one glass sherry, one small glass brandy, juice of half a lemon, peel of one-quarter of a lemon, sugar and nutmeg to taste. Flavor it with extract of pine-apple, strain, and ice it all well.

Cinders in the Eye—to remove.—A small camel's-hair brush, dipped in water and passed over the ball of the eye on raising the lid. The operation requires no skill, takes but a moment, and instantly removes any cinder or particle of dust or dirt, without inflaming the eye.

Cisterns—to make water tight.—Paint thickly on the inside with a mixture of eight parts melted glue and four of linseed oil, boiled with litharge. In forty-eight hours it will be so hard that the tank can be filled with water.

Citron—to preserve.—Cut the citron in thin slices, pare off the outside rind and take out all the seeds, put in the preserve kettle with water enough to cover it; boil till it can be pierced easily with a fork, skim it out and strain the water, placing it back in the kettle; allow three-quarters of a pound of sugar to a pound of citron; dissolve the sugar in the liquor; cut three or four lemons into it and let it boil till it is as thick as required, then put in the citron and boil; when it is transparent then it is done; if boiled too long the citron will be tough.

Citron Preserves.—Take of citron and sugar equal weight; put the citron in a kettle or stewpan, boil until tender, then put in a col-

ander to drain. I often leave mine until morning to drain well, then take this water, put it in your kettle with the sugar, and boil and skim until clear, then put in your citron, boil until well done; flavor with lemon if you like. This has been my plan for over thirteen years, and to my remembrance I have never had any sour. I also preserve watermelon rinds the same way.

Clams—with cream.—Chop fifty small clams, not too fine, and season with pepper and salt. Put into a stewpan, butter the size of an egg, and when it bubbles, sprinkle in a teaspoonful of flour, which cook a few minutes; stir gradually into it the clam liquor, then the clams, which stew about two or three minutes, then add a cupful of boiling cream, and serve immediately.

Cleaning Mixture.—To clean coat collars and to take out grease from floors or carpets, and to clean paint or white walls (kalsomined) take half a bar of washing soap, and a lump of saltpeter and sal soda each as large as a walnut; add two quarts boiling soft water, stir well and let it stand till cool, then add three ounces of ammonia, bottle and cork tight. Will keep good a year. It is best to bottle when lukewarm, and add the ammonia at any time.

Cleaning Compound.—Mix one ounce of borax and one ounce of gum camphor with one quart of boiling water. When cool add one quart of alcohol; bottle and cork tightly. When wanted for use shake well and sponge the garments to be cleaned. This is an excellent mixture for cleaning soiled black cashmere and woolen dresses, coat collars and black felt hat.

Clinkers—to loosen.—Clinkers may be loosened from fire-bricks by throwing in the fire-box, when very hot, two or three quarts of oyster or clam shells, or a less quantity of salt, allowing the fire to go out, and then cleave off the clinkers.

Clocks—to clean.—Take the movement of the clock to pieces. Brush the wheels and pinions thoroughly with a stiff, coarse brush; also the plates which the trains work. Clean the pivots well by turning in a piece of cotton cloth held tightly between your thumb and finger. The pivot holes in the plates are generally cleansed by turning a piece of wood into them, but I have always found a strip of cloth or a soft cord drawn tightly through them to act the best. If you use two cords, the first one slightly oiled, and the next dry, to clean the oil out, all the better. Do not use salt or acid to clean your clock—it can do no good, but may do a great deal of harm. Boiling the movement in water, as is the practice of some, is also foolishness.

To Oil Properly.—Oil only, and very lightly, the pallets of the verge, the steel pin upon which the verge works, and the point where the loop of the verge wire works over the pendulum wire. Use none but the best watch oil. Though you might be working constantly at the clock-repairing business, a bottle costing you but twenty-five cents would last you two years at least. You can buy it at any watch-furnishing establishment.

A Defect to Look After.—Always examine the pendulum wire at the

point where the loop of the verge wire works over it. You will generally find a small notch, or at least a rough place worn there. Dress it out perfectly smooth, or your clock will not be likely to work well. Small as this defect may seem, it stops a large number of clocks.

Closets (Damp)—to purify.—In damp closets and cupboards generating mildew, a tray full of quicklime will be found to absorb the moisture and render the air pure. Of course it is necessary to renew the lime from time to time as it becomes slacked. This remedy will be found useful in safes and strong-rooms, the damp air of which acts frequently most injuriously on the valuable deeds and documents contained therein.

Clothes—to clean from grease and other stains.—Take one peck of new lime; pour over it as much water as will leave about two gallons of clear liquid after it has been well stirred and has settled. In about two hours pour off the clear liquid into another vessel; then add to it six ounces of pearlash, stir it well, and when settled, bottle it for use. With this liquid wash the clothes, using a coarse piece of sponge for the purpose. If the clothes are of very fine fabric and delicate color, the liquid must be diluted with clear soft water.

Clothes-pin Apron.—A great help in hanging out clothes is an apron to put the pins in. Mine is sixteen inches long and eighteen inches wide, rounded at the corners. It is double, and at each side near the belt the outside piece is cut away and bound, making openings to put in the pins and take them out when hanging out the clothes. The apron is bound around firmly and will hold several dozens of pins. A belt fastens it about the waist, and with this on there is no need of stooping to pick up clothes-pins. In this apron may be kept a pair of cotton flannel mittens to wear when hanging out the clothes in cold weather. They are a great saving of the hands. One who has once had a pair of these mittens and one of these aprons will not willingly do without either of them.

Cloth—to bleach.—In eight quarts of warm water put one pound of chloride of lime; stir with a stick a few minutes, then strain through a bag of coarse muslin, working it with the hand to dissolve thoroughly. Add to this five bucketfuls of warm water, stir it well and put in the muslin. Let it remain in one hour, turning it over occasionally, that every part may get thoroughly bleached. When taken out, wash well in two waters to remove the lime, rinse and dry. This quantity will bleach twenty-five yards of yard-wide muslin. The muslin will bleach more evenly and quickly if it has been thoroughly wet and dried before bleaching.

Clothes (White)—to wash.—If you wish your white clothes to look clear and pure white, always have ready a kettle of boiling water and scald them thoroughly before putting them in the last rinse water. Clothes washed ever so clean will look dingy if soapy water is allowed to dry into them. Scalding removes the suds. Prints should be washed out a piece at a time in warm water, rinsed, and hung to dry

immediately. But very few colors will bear soaking in hot soap-suds. If you want your flannels to full, wash them in hot water, rub well upon a board, using plenty of soap, and rinse in cold water. This rules never fails.

Cloth—to make water-proof.—To make cloth water-proof, dissolve eight pounds oleic acid in six quarts of alcohol; add gradually twenty pounds sulphate of alumina, leave twenty-four hours to settle; carefully pour off the liquid and save the remaining deposit; filter this through flannel and press it into a cake. Dissolve one pound of this in fifteen to twenty gallons of water, strain, saturate the fabric thoroughly, remove and let dry. The fabric is water-proof without having its ventilating qualities destroyed.

Cloth—to fasten on wooden surfaces.—The following is a German process for fastening cloth to the top of tables, desks, etc.: Make a mixture of two and a quarter pounds of wheat flour, two tablespoonfuls of powdered resin, and two tablespoonfuls of powdered alum; rub the mixture in a suitable vessel, with water, to a uniform, smooth paste; transfer this to a small kettle over a fire, and stir until the paste is perfectly homogeneous—without lumps. As soon as the mass has become so stiff that the stirrer remains upright in it, transfer it to another vessel and cover it up, so that no skin may form on its surface. This paste is applied in a very thin layer to the surface of the table; the cloth, etc., is then laid and pressed upon it, and smoothed with a roller. The ends are cut after drying. If leather is to be fastened on, this must first be wet. The paste is then applied, and the leather rubbed smooth with a cloth.

Clothes—to wash (French way).—A system of washing clothes has lately been introduced in some French towns which is worthy of special mention. Its economy is so great as to greatly reduce the cost. This is the process: Two pounds of soap are reduced with a little water to a pulp, which having been slightly heated, is cooled in ten gallons of water, to which is added one spoonful of turpentine oil and two of ammonia; then the mixture is agitated. The water is kept at a temperature which may be borne by the hand. In this solution the white clothes are put and left there for two hours before washing them with soap, taking care in the meantime, to cover the tub. The solution may be warmed again and used once more, but it will be necessary to add half a spoonful of turpentine oil and another spoonful of ammonia. Once washed with soap, the clothes are put in hot water, and the blue is applied.

This process, it is obvious, saves much labor, much time and fuel, while it gives the clothes a whiteness much superior to that obtained by any other process, and the destructive use of the wash-board is not necessary to clean the clothes from impurities.

Clothing Renovator.—Soft water, one gallon; make a strong decoction of logwood by boiling the extract with the water. Strain, when cool; add two ounces gum arabic in powder; bottle, cork well, and set aside for use; clean the coat well from grease and dirt and

apply the above liquid with a sponge evenly. Dilute to suit the color, and hang in the shade to dry; afterward brush the nap smooth and it will look like new.

Cloth—to raise a nap on.—Clean the article well; soak it in cold water for half an hour; put it on a board, and rub the threadbare parts with a half-worn hatter's card filled with flocks, or with a teazle or a prickly thistle until a nap is raised; then lay the nap the right way with a hatter's brush, and hang up to dry.

Clothes (Acid on)—to restore.—Dampen as soon as possible after exposure to the acid with spirits ammonia. It will destroy the effect immediately.

Clothing (On Fire)—to extinguish.—Immediately throw a rug, a piece of carpet, a coat, or anything woolen, over the victim so as to smother the flames, and do not allow her or him to run away from you. In removing the clothes be careful not to pull off the skin; and if only slightly burned, apply lime water and linseed oil. If at all severe send for a physician.

Coal—how to burn.—A writer in the *Journal of Health* offers the following suggestions concerning the economical combustion of coal: A very common mistake is made and much fuel wasted in the manner of replenishing coal fires, both in furnaces and grates. They should be fed with a little coal at a time, and often; but servants, to save time and trouble, put on a great deal at once, the first result being that almost all the heat is absorbed by the newly put-on coal, which does not give out heat until it has itself become red hot. Hence, for a while, the room is cold, but when it becomes fairly aglow the heat is insufferable. The time to replenish a coal fire is as soon as the coals begin to show ashes on their surface; then put on merely enough to show a layer of black coal covering the red. This will soon kindle, and as there is not much of it, an excess of heat will not be given out. Many almost put out the fire by stirring the grate as soon as fresh coal is put on, thus leaving all the heat in the ashes when it should be sent to the new supply of coal. The time to stir the fire is just when the new coal laid on is pretty well kindled. This method of managing a coal fire is troublesome, but it saves fuel, gives a more uniform heat, and prevents the discomfort of alterations of heat and cold above referred to.

Cockroaches—ways to destroy.—1. The disagreeable odor which the cockroach emits, and which soon permeates all places that it inhabits, proceeds from a dark colored fluid which it discharges from the mouth. The cockroach loves warmth and moisture, hence its populousness in kitchens where fire and water are almost ever present. It is a night prowler, and swarms out from its secret lairs on the departure of daylight.

For the destruction of the cockroach we recommend a mixture containing a tablespoonful of red lead, the same amount of Indian meal, with molasses enough to make a thick batter. Set this on a plate at night in places frequented by the insects and all that eat of it

will be poisoned. Another preparation is composed of one teaspoonful of powdered arsenic, with a tablespoonful of mashed potato. Crumble this every night at bed-time where the insects will find it, and it is said to be an effectual poison. Great care should be exercised in the use of such dangerous agents. An innocent method of destroying cockroaches is to place a bowl or basin containing a little molasses on the floor at night. A bit of wood, resting one end on the floor and the other on the edge of the vessel, serves as a bridge to conduct the insects to the sweet deposit. Once in the trap its slippery sides prevent retreat, and thus cockroaches may be caught by the thousands.

2. The following is said to be effectual: These vermin are easily destroyed, simply by cutting up green cucumbers at night, and placing them about where roaches commit depredations. What is cut from the cucumbers in preparing them for the table answers the purpose as well, and three applications will destroy all the roaches in the house. Remove the peelings in the morning and renew them at night.

3. Common red wafers, to be found at any stationers, will answer the purpose. The cockroaches eat them and die. Also, sprinkle powdered borax plentifully around where "they most do congregate," and renew it occasionally; in a short time not a roach will be seen. This is a safe and most effectual exterminator.

4. Borax is a very good cockroach exterminator. Take some pieces of board, spread them over with molasses, only sufficient to make the borax when sprinkled upon it stick, and place the boards in their haunts. Gum camphor is a speedy remedy to clear the house of cockroaches.

Codfish Balls.—Soak codfish cut in pieces about an hour in lukewarm water, remove skin and bones, pick to small pieces, return to stove in cold water. As soon as it begins to boil, change the water and bring to a boil again. Have ready potatoes boiled tender, well mashed and seasoned with butter. Mix thoroughly with the potatoes half the quantity of the codfish while both are still hot, form into flat thick cakes, or round balls, fry in hot lard or drippings, or dip in hot fat, like doughnuts. The addition of a beaten egg before making into balls renders them lighter. Cold potatoes may be used by reheating adding a little cream and butter, and mixing while hot

Codfish Sauce.—Boil a piece of codfish, but do not overdo it. Pick out the flesh in flakes, put them in a sauce-pan with a piece of butter, pepper and salt to taste, some minced parsley, and the juice of a lemon, with a dust of Cayenne. Put it on the fire till quite hot, and serve.

Coffee—a disinfectant.—Numerous experiments with roasted coffee prove that it is the most powerful means, not only of rendering animal and vegetable effluvia innocuous, but of absolutely destroying them. A room in which meat in an advanced degree of decomposition had been kept for some time, was instantly deprived of all smell

on an open coffee-roaster being carried through it, containing a pound of coffee newly roasted. In another room, exposed to the effluvium occasioned by the clearing out of the dung-pit, so that sulphureted hydrogen and ammonia in great quantities could be chemically detected, the stench was completely removed in half a minute on the employment of three ounces of fresh roasted coffee, while the other parts of the house were permanently cleared of the same smell by being simply traversed with the coffee roaster, although the cleansing of the dung-pit continued for several hours after. The best mode of using the coffee as a disinfectant is to dry the raw bean, pound it in a mortar, and then roast the powder on a moderately-heated iron plate, until it assumes a dark brown tint, then it is fit for use. Then sprinkle it in sinks or cess-pools, or lay it on a plate in the room which you wish to have purified. Coffee acid or coffee oil acts more readily in minute quantities.

Coffee—ways to make.—1. Take of unground coffee the usual quantity which supplies your family, and break the beans in a mortar This you will find to be quite as easy a task as grinding it in the usual way, as the beans are brittle and break readily. Have over the fire a kettle of perfectly fresh water, and let it boil. This is quite an essential feature. Put the coffee in a boiler, similar in shape to an oyster stew-pan, if you have it, but an ordinary coffee-pot will do, without the addition of any clarifying substance whatever, white of egg, egg shells, fish skin, or anything else, and when the water first comes to a boil, pour it over the coffee and count two; then grasp the pan by the handle and give it a vigorous shake. Let it stand where it will keep up to the boiling point (but never pass it) two minutes, and it is ready for use. You will find that it will pour out as clear and strong as brandy, and with a sparkling flavor and spirit, so to speak, that to all lovers of good coffee will be quite delightful.

2. Coffee should be quickly and evenly roasted to a light-brown color. A few burned grains will impart a disagreeable flavor to it when made. Only a sufficiency for four or five days should be roasted at one time, and it should never be ground until required for use.

The following is an excellent method of making coffee both in barracks and in the field. It is the favorite recipe at Delmonico's:

Heat the grounds hot in a mess-pan, one tablespoonful for each person and one for the pot or kettle; then pour on boiling water, one cupful for each spoonful of coffee. Cover tight and stand where it will keep hot, but not boil, for fifteen or twenty minutes. Then strain into the cups. The coffee should never be boiled. "Coffee boiled is coffee spoiled."

3. In the first place, get the very best coffee, equal parts of Mocha and Java. Keep this in a tightly-covered jar after roasting, and grind it fresh every morning. For three grown people use six tablespoonfuls of coffee, put it in a bowl, and break a fresh egg into it, shell and all. Mix till the coffee is wet throughout, then put it

into a hot tin coffee-pot, turn on two quarts of boiling water, set it on the stove, and let it boil briskly for ten minutes; then pour in half a cupful of cold water, set it on the table a minute or two to settle, and then pour through a little wire strainer into the coffee-pot intended for the table. Use hot milk with the coffee.

Coffee (a la Turk).—Coffee a la Turk is thus concocted: In a copper coffee-pot bring water to its first full boil. After having ground the coffee in an ordinary mill, screw it (the mill) to its finest possible capacity and regrind the coffee, which becomes almost dust. To every cup of water add a heaping teaspoonful of this coffee dust, throw dry into the boiling water; take it a second from the fire, let come again to a boil, and repeat the ceremony three times, and if the coffee be true Mocha, it is a nectar fit for the gods. It must be sweetened to the taste while on the fire.

Coffee—to preserve the aroma of.—Add the white of an egg to every pound of coffee just before it is quite cold. Stir it thoroughly into the mass, so that every berry will be wet with it.

Coffee (Cream)—whipped.—Whipped coffee cream for one who likes the coffee flavor is perfectly delicious as a last morsel at a formal dinner or an afternoon lunch. Take two ounces of coffee beans and roast them; while fresh and still warm put them in one pint of rich cream, which you have sweetened liberally with sugar. Let this stand for an hour; then strain it through a muslin cloth laid in a colander; dissolve a teaspoonful of gelatine in a little cold milk, and add to the cream; then whip it to a firm froth. The gelatine may be dissolved in a little orange water, or lemon extract if you choose.

Coffee (Rice)—to make.—Brown rice as you would the coffee bean, and then either grind or mash in the mortar; take half a cup of the ground rice and pour about a quart of boiling water over it and let it stand about ten or fifteen minutes; then strain and sweeten with loaf sugar, and season with boiled milk. This is particularly nice for children.

Coffee-pots—to cleanse.—Musty coffee-pots and tea-pots may be cleaned and sweetened by putting a good quantity of wood ashes into them and filling up with cold water. Set on the stove to heat gradually till the water boils. Let it boil a short time, then set aside to cool, when the inside should be faithfully washed and scrubbed in hot soap-suds, using a small brush that every spot may be reached, then scald two or three times and wipe till well dried. It must be a desperate case if the vessels are not found perfectly sweet and clean, if this advice is strictly followed. Pots and pans or plates that have been used for baking and grown rancid may be cleansed in the same way. Put the plates into a pan with wood ashes and cold water, and proceed as above stated. If no wood ashes can be had, take soda. If cooks would clean their pie-plates and baking dishes after this fashion after using, they would keep sweet all the time.

Cold—simple remedies for.—Simple remedies will usually remove a cold, if taken promptly, before the congestion has produced serious

disorganization. When struck with a sense of chilliness, fifteen to thirty drops of aromatic spirits of ammonia in half a tumbler of water will often start a uniform circulation all through the body, as this quickly enters the whole blood and is stimulating. Soaking the feet in warm water, gradually adding warmer water as long as it can be borne, draws off the blood from all the rest of the body, and often relieves congestion in any local part. Smart friction upon any part or the whole of the skin surface, or a uniform surface sweating, produces like results. But in these cases, special care must be taken to prevent after-chilling of the feet, or any other part. After the feet heating, wipe dry quickly and cover them warmly.

The best remedy we have found for a recent cold is a moderate movement of the bowels with castor oil, or calcined magnesia, or other mild cathartic. This produces a flow of fluid, drawn from the blood to the alimentary canal, and thus reduces the pressure upon any one congested point, just as drawing off part of the water from a flooded pond relieves pressure upon a weakened dam or embankment. This is to be followed by keeping the body warm and comfortable, and toning it up with good food, or a simple tonic like quinine.

Cold—to cure.—Put a large teacupful of linseed, with a quarter of a pound of sun raisins and two ounces of stick licorice into two quarts of soft water, and let it simmer over a slow fire till reduced to one quart; add to it a quarter pound of pounded sugar candy, a tablespoonful of old rum, and a tablespoonful of the best white-wine vinegar or lemon-juice. The rum and vinegar should be added as the decoction is taken; for, if they are put in at first, the whole soon becomes flat and less efficacious. The dose is half a pint, made warm, on going to bed; and a little may be taken whenever the cough is troublesome. The worst cold is generally cured by this remedy in two or three days; and, if taken in time, it is considered infallible.

Cold on the Chest.—A flannel dipped in boiling water and sprinkled with turpentine laid on the chest as quickly as possible, will relieve the most severe cold or hoarseness.

Cold in the Head—remedy for.—When one has a bad cold and the nose is closed up so that he cannot breathe through it, relief may be found instantly by putting a little camphor and water in the center of the hand and snuffing it up the nose. It will be found a great relief. Dr. Pollion, of France, says that cold in the head can be cured by inhaling hartshorn. The inhalation by the nose should be seven or eight times in five minutes.

Cold—to relieve.—When you get chilly all over and away into your bones, and begin to sniffle and almost struggle for your breath, just begin in time and your tribulations need not last very long. Get some powdered borax and snuff the dry powder up your nostrils. Get your camphor bottle, smell it frequently, pour some on your handkerchief, and wipe your nose with it whenever needed. Your nose will not get sore, and you will soon wonder what's become of your cold. Begin

this treatment in the forenoon and keep on at intervals until you go to bed, and you will sleep as well as you ever did.

Cold—remedies for.—1. Boil two ounces of flaxseed in one quart of water; strain, and add two ounces of rock candy, one-half pint of honey, juice of three lemons; mix, and let all boil well; let cool, and bottle. Dose, one cupful on going to bed, one-half cupful before meals. The hotter you drink it the better.

2. When one feels the approach of a severe cold, he may often find relief by using composition tea. The following is the recipe for the powder. Take one-half ounce of red pepper, one-half ounce of cloves, one-half ounce of cinnamon, one-half pound of bay-berry bark, and one-half pound of ginger. The ingredients should all be ground and thoroughly mixed. Put in wide-mouthed bottles and cork tight. When needed, put a teaspoonful of the powder in a bowl and fill it with boiling water. Milk and sugar make it very palatable.

3. Lemonade with loaf sugar, used freely, and taken as hot as can be swallowed comfortably, on going to bed is excellent for a cold. Lemons should be used freely, and sugar also, and you should not go into the cold after taking it but cover warm in bed. Lemon juice with sugar should be used freely at all times while the cold remains. There is nothing better.

Cold Feet—ways to relieve.—1. People who write or sew all day, or rather those who take but little exercise, may warm their cold feet without going to the fire. All that is necessary is to stand erect and very gradually to lift one's self up upon the tips of his toes, so as to put all the tendons of the foot at full strain. This is not to hop or jump up and down, but simply to rise—the slower the better—upon tiptoe, and to remain standing on the points of the toes as long as possible, then gradually coming to the natural position. Repeat this several times, and, by the amount of work the tips of the toes are made to do, in sustaining the body's weight, a sufficient and lively circulation is set up. Even the half-frozen car-driver can carry this plan out. It is one rule of the "Swedish movement" system, and, as motion warmth is much better than fire warming, persons who suffer with cold feet at night can try this plan just before retiring to rest.

2. A very valuable recipe for a foot-bath for any one troubled with cold feet: One pound prickly ash bark, a quarter of a pound of white mustard, and a quarter of a pound of pepper. Boil in one gallon of water, strain and bottle and keep cool. Use a teacupful of this with two quarts of water for a foot-bath at bed-time.

3. The only sure and efficient way to warm cold feet is to dip them in cold water, and then rub them dry briskly with a coarse towel.

Cold Slaw—delicious.—Do not mash the cabbage, or the dressing will be poor and thin. Cut fine, and seasoning with salt and pepper, put in a crockery bowl or dish. Rub well together a teaspoonful of flour, and butter the size of a walnut, pour on it two tablespoonfuls of boiling water, and stir smoothly on the stove; push back so it will

keep hot, but not boil, and add two teaspoonfuls of vinegar; beat light the yolks of two eggs, a teaspoonful of sugar, half a teaspoonful of mustard, and two tablespoonfuls of cream, sour or sweet; pour the hot mixture on this, beat well, and replacing on the stove, let it come to a boil, and pour hot on the cabbage.

Cold—to restore animation.—The restoring of animation after intense cold is a most painful sensation. By no means allow the patient to come near the fire. Rub the body with snow, ice, or cold water, and restore warmth to it by slow degrees. A little brandy, or warm brandy and water, should be administered.

Colic—remedies for.—1. For the violent internal agony termed colic, take a teaspoonful of salt in a pint of water; drink and go to bed. It is one of the speediest remedies known. It will revive a person who seems almost dead from a heavy fall.

2. Phares' method of treating colic consists in inversion—simply in turning the patient upside down. Colic of several days' duration has been relieved by this means in a few minutes.

3. Dr. Tepliashin has recommended a thin stream of cold water from a teapot lifted from one to one and a half feet from the abdomen, in cases of colic. He has seen it relieve pain when opium and morphia had failed.

4. A loaf of bread, hot from the oven, broken in two, and half of it placed upon the bowels, and the other half opposite it upon the back, will relieve colic from whatever cause almost immediately.

Collodion—uses of.—This is gun-cotton dissolved in ether. It is very useful for many purposes, especially is it useful in photography. Those who take pleasure in striking cuttings of tender plants in Waltonian cases, or under small glasses in the house will find it of great assistance in the case of all soft-wooded plants to touch the wound at the lowest joint of the cutting which enters the ground with a camel-hair brush dipped in collodion. This will materially hasten the formation of the callous, which is necessary before any roots can be formed.

Color—to restore.—When the color on a fabric has been destroyed by acid, ammonia neutralizes the same, after which the application of chloroform will restore the original color.

Color Blindness.—This malady is incurable, if congenital. When not inherited an education of the sight will remove it.

Coloring Recipes.—In using the following recipes remember that the goods should always be wet in hot soapsuds before they are put into the dye. Be very careful to have the materials thoroughly dissolved and keep the dye hot, constantly stirring the goods, lifting them up to the air and turning them over:

BROWN.—For five pounds of goods allow one pound of catchu and two ounces of alum, dissolved in sufficient hot water to wet the goods. Put this in a brass kettle or tin boiler on the stove, and when it is boiling hot put in the goods and remove it from the stove. Have ready four ounces of bi-chromate of potash dissolved in hot water in

a wooden pail. Drain the goods from the catchu and dip them into the bi-chromate of potash, then back into the catchu again. Proceed in this way, dipping into each alternately until the required shade is produced. This colors a nice brown on cotton, woolen, or silk.

BLUE (ON COTTON).—Dissolve four ounces of copperas in three or four gallons of water. Soak the goods thoroughy in this, and then drain and transfer to a solution of two ounces of prussiate of potash in the same quantity of water. Lift the goods from this and put them to drain, then add to the prussiate of potash solution one-half ounce of oil of vitriol, being careful to pour in a few drops only at a time; stir thoroughly return the goods, and as soon as of the desired shade rinse them in clear water and dry. This will color five pounds.

YELLOW (ON COTTON).—For five pounds of goods, dissolve one pound of sugar of lead in enough water to thoroughly saturate the goods, and one-half pound of bi-chromate of potash in the same quantity of water in a separate vessel. Dip the goods well, and drain in each alternately until the desired shade is secured, then rinse and dry. If an orange is desired, dip the yellow rags into strong, hot lime water before rinsing.

GREEN (ON COTTON).—First color blue, and then proceed as in coloring yellow.

TURKEY RED (ON COTTON).—For four pounds of cloth, take one pound of sumac in enough soft water to cover the cloth in a tub, soak over night, wring out and rinse in soft water. Take two ounces of muriate of tin in clear soft water, put in the cloth and let it remain fifteen minutes. Put three pounds of bur wood in cold soft water, in a boiler, on a stove, and nearly boil, then partly cool, then put in the cloth and boil one hour. Take out the cloth and add to the water in the boiler one ounce of oil of vitriol, put in the cloth and boil fifteen minutes. Rinse in cold water.

DARK BROWN.—For dark brown, four ounces of blue vitriol, two pounds of cutch, and six ounces of bi-chromate of potash. This is for ten pounds of cloth. Put the cutch in an iron kettle, in cold water enough to cover the cloth, heat until dissolved, dissolve the vitriol, and add it to the dye, put in the cloth and scald it an hour or more. Wring it from the dye, dissolve the bi-chromate of potash in boiling water in brass, and put in the cloth for fifteen minutes.

CANARY (ON COTTON).—Take one-half pound of sugar of lead, and dissolve it in hot water. Dissolve one-fourth pound of bi-chromate of potash in cold water in a wooden vessel. Dip the goods first in the lead water, then in the potash, so continuing until the color suits. This quantity will color five pounds of rags.

Cologne Water.—Alcohol, one gallon; add oil of cloves, lemon, nutmeg, and bergamot, each one dram; oil neroli, three and a half drams; seven drops of oil of rosemary, lavender and cassia; half a pint of spirits of nitre, half a pint of elder flower water. Let it stand a day or two, then take a colander and at the bottom lay a piece of

white cloth, and fill it up, one-fourth of white sand, and filter through it.

Colts—care of.—Young colts should be well fed and cared for the first winter; provide a warm stall for them, with plenty of litter, and give them a good brushing down once every day. A quart of oats, daily, will be needed, and some bright, clean, sweet hay. Cut feed is not suitable for young colts, whose digestion should not be overtaxed by food packed solidly in the stomach; feed light and frequently.

Comfortables—to renovate.—After washing and thoroughly drying bed-quilts, fold and roll them tight, then give them a beating with the rolling-pin to liven up the batting, and make them soft and new.

Composition for Boots and Shoes—(Waterproof).—Beeswax, two ounces; beef suet, four ounces; resin, one ounce; neatsfoot oil, two ounces; lampblack, one ounce. Melt together.

Composition—for driving out rats, etc.—Keep on hand a quantity of chloride of lime. The whole secret consists in scattering it dry all around their haunts and into their holes, and they will leave at once, or a liberal decoction of coal tar placed in the entrance of their holes will do as well.

Compost—materials for.—In several of the States a compost heap may be made of muck or earth for a basis; to this may be added leaves, cotton-seed, ashes, gypsum, night-soil, stable manure, trash from the fields, except weeds in seed, and all the slops from the houses and cabins. If desired, bone-dust may be added, but the fine artificial fertilizers will be better, if used by themselves.

Composition Powder (Thompson's).—Bayberry bark, two pounds; hemlock bark, one pound; ginger root, one pound; Cayenne pepper, two ounces; cloves, two ounces; all finely pulverized and well mixed. Dose, one-half teaspoonful of it and a spoonful of sugar; put them into a tea-cup and pour it half full of boiling water; let it stand a few minutes, and fill the cup with milk and drink freely. If no milk is to be obtained, fill up the cup with hot water.

Consumption Cure.—The following is said to be an effectual remedy, and will in time completely cure the disorder. Live temperately, avoid spirituous liquor, wear flannel next the skin, and take every morning half a pint of new milk mixed with a wineglassful of the expressed juice of green horehound. One who has tried it says: "Four weeks' use of the horehound and milk relieved the pains in my breast, gave me ability to breathe deep, long and free, strengthened and harmonized my voice, and restored me to a better state of health than I had enjoyed for years."

Consumption—remedy for.—Mix together sixteen ounces of liquid tar and one fluid ounce of liquor of potassa, boil them for a few minutes in the open air, then let it simmer in an iron vessel over a spirit or other lamp in the chamber of the patient. This may at first excite a disposition to cough, but in a short time it allays it, and removes any tendency to it.

Convulsions.—Dr. Williamson reports an interesting and remarkable case in which he saved the life of an infant in convulsions by the use of chloroform. He commenced the use of it at nine o'clock one evening, at which period the child was rapidly sinking, numerous remedies having been already tried without effect. He dropped half a dram of chloroform into a thin muslin handkerchief, and held it about an inch from the infant's face. In about two minutes the convulsions gave way, and the child fell into a sleep. By slightly releasing the child from the influence of the chloroform, he was able to administer food by which the child was nourished and strengthened. The chloroform was continually administered in the manner described, from Friday evening at nine o'clock until Monday morning at nine. This treatment lasted sixty hours, and sixteen ounces of chloroform were used. Dr. Williamson says he has no doubt that the chloroform was instrumental in saving the infant's life; and that no injurious effects, however trivial, from the treatment adopted, have subsequently appeared.

Cooking Hints.—Cooking needs an intelligent, cultivated mind to guide the hands quite as much as painting and music. It is one thing to prepare food so carefully that it shall look inviting and be nourishing and digestible; quite another to mix a few ingredients, place them in the oven, or over the stove, which is either too hot or too cold oftentimes, without any interest as to the result. Take one or two common dishes as cooked by ordinary servants, and compare them with what they should be; for instance, that much abused dish, "hash." No wonder, as it is brought to the table too often. The odds and ends of meat, left over from many meals, are picked up; some are fresh and some dry, some with tough gristle on, and all chopped together with potatoes, the latter perhaps just cooked and hot, which spoils all hashes. It is put into a cold spider, with fat of some kind, and moistened with water, sometimes too much and sometimes too little. When hot it is sent to the table. The real, appetizing hash is something very different and a nice breakfast dish. Water in which meat of any kind has been boiled should be set away to cool, the fat removed and the broth saved for soups, stews and hashes. All gravies should be saved and treated in the same way, and no fat at all left in them. A jar of extract of beef should be in every house, and if there is neither of the above on hand, a quarter of a teaspoonful of the extract in a half cup of hot water will moisten and flavor the hash, and add very much to its richness. More should be used if the quantity of hash needed is large. Corned beef is always best, but the hash is good when made of cold roast beef, mutton, or fowls. A roast beef bone will often have on it meat enough for hash, when there is not enough for the table in any other form. It should be boiled in a very little water, and the water saved to moisten it, until the meat loosens from the bones, then chopped with twice the amount of cold boiled potatoes, seasoned with salt and pepper and moistened before putting on the fire. The spider with a

little butter or beef-dripping in it, should be boiling hot, the hash put on and covered until a light brown crust has formed; then turned over on the platter and served.

The odor of cabbage when boiling may be remedied almost entirely by placing a lump of charcoal in the pot with the cabbage. In boiling greens a lump of dough the size of a hen's egg tied in a clean cloth and placed to boil with the greens will absorb all offensive odor.

Copartnerships.—Partnerships may be either general or special. In general partnerships money invested ceases to be individual property. Each member is made personally liable for the whole amount of debts incurred by the company. The company is liable for all contracts or obligations made by individual members.

Special partners are not liable beyond the amount contributed.

A person may become a partner by allowing people generally to presume that he is one, as, by having his name on the sign, or parcels, or in the bills used in the business.

A share or specific interest in the profits or loss of a business, as remuneration for labor, may involve one in the liability of a partner.

In case of bankruptcy, the joint estate is first applied to the payment of partnership debts, the surplus only going to the creditors of the individual estate.

A dissolution of partnership may take place under express stipulations in the articles of agreement, by mutual consent, by the death or insanity of one of the firm, by award of arbitrators, or by court of equity in cases of misconduct of some member of the firm.

In case of death, the surviving partners must account to the representatives of the deceased.

Copying Paper—to make.—To make black paper, lampblack mixed with cold lard; red paper, venetian red mixed with lard; green paper, chromo green mixed with lard; blue paper, prussian blue mixed with lard. The above ingredients to be mixed to the consistency of thick paste, and to be applied to the paper with a rag, then take a flannel rag and rub till all color ceases coming off. Cut your sheets four inches wide, and six inches long, put four sheets together, one of each color, and sell for twenty-five cents per package. The first cost will not be over three cents. Directions for writing: Lay down your paper upon which you wish to write; then lay on the copying paper, and over this lay any scrap of paper you choose; then take any hard pointed substance and write as you would with a pen.

Coral—to clean.—Soak it in soda and water for some hours. Then make a lather of soap, and with a soft hair-brush rub the coral lightly, letting the brush enter all the interstices. Pour off the water and replenish it with clean constantly, and then let the coral dry in the sun.

Cordial (Blackberry).—Let the fruit simmer awhile and then press out juice; to each pint of the same, put nearly equal quantities of white sugar; boil and skim, and when a thick jelly, put in bottles, filling

half-way; when cold, fill up with good whisky or French brandy. It tastes as if highly spiced, and is splendid for medicinal purposes.

Cordial (Godfrey's).—Sassafras, six ounces; seeds or coriander, caraway, and anise, of each one ounce; infuse in six pints of water, simmer the mixture till reduced to four pints, then add six pounds of molasses; boil a few minutes; when cold add three fluid ounces of tincture of opium. For children teething.

Cordial (Neutralizing).—Take of powdered rhubarb, bi-carbonate potash, powdered peppermint leaves, each three ounces; oil of cinnamon, oil of erigeron, each two drams; water, four pints; alcohol, ninety-five per cent., eight ounces; sugar, thirty-two ounces; infuse the powders in the boiling water for a half-hour, and express and strain; then dissolve the sugar in the liquor by means of heat; while the mixture is cooling, add the essential oils dissolved in the alcohol. Dose, one or two teaspoonfuls every three hours, or oftener, as may be required, in diarrhœa, dysentery, and the summer complaints of children, etc.

Cordial (Peppermint).—Good whisky, ten gallons; water, ten gallons; white sugar, ten pounds; oil peppermint, one ounce, in one pint alcohol, one pound flour well worked in with the fluid, one-half pound burnt sugar to color. Mix and let it stand one week before using. Other oil in place of peppermint, and you have any flavor desired.

Corns—treated with salicylic acid.—Dr. Traill Green speaks highly of the results obtained in the treatment of hard and soft corns with salicylic acid. He has adopted a formula recommended by Dr. Gezou, which is as follows: Salicylic acid, thirty parts; extract of cannabis indica, five parts; collodion, two hundred and forty parts. The collodion fixes the acid to the part and protects it from friction; the cannabis indica acts as an anodyne, and the acid reduces and loosens the corn so that it comes off in four or five days. The remedy is applied with a camel's-hair pencil, and if the corn is not well cured, the application may be repeated. In four or five days the patient should use a warm foot bath and rub off the collodion. If any portion of the corn remains, the acid should be applied again, and the treatment continued until the whole of the corn has disappeared.

Corns—on the bottom of the foot.—Corns, wherever they occur, are generally due to unequal pressure, or to the rubbing of the spot by the shoe or boot. As a rule, if the cause is removed, a cure will be made. Use an in-sole of leather, or of pasteboard, cutting in it a hole large enough to receive the corn. If the sole is thick enough to prevent all pressure upon the corn, it will probably get well.

Corns—treatment of.—1. Corns are a thickened state of the scarf-skin, caused by pressure or friction. The part of the skin acted upon becomes hard, and presses upon the sensitive skin within, which, endeavoring to relieve itself, produces an additional quantity of scarf-skin. Treatment: Soak the feet in warm water, pare the top of the corn, and apply one drop of the following solvents: 1,

Lunar caustic. Moisten the corn and rub it with the caustic. 2. Nitric acid, applied with a rod or stick. 3. Strong solution of subcarbonate of potash. The corn is gradually eaten away and disappears. As corns are the result of friction, they may be prevented or driven away at an early stage by anointing them every night and morning with sweet oil, on the same principle that lubrication is applied to axle-trees, etc., to prevent friction injuring them.

2. Soak the feet well in warm water, pare off as much of the corn as can be done without pain, and bind up the part with a piece of linen or muslin, thoroughly saturated with sperm oil, or, what is better, the oil from herring or mackerel. After three or four days the dressing may be found of a soft and healthy texture, and less liable to the formation of a new corn than before. We have obtained this recipe from a reliable source which we cannot well doubt.

3. A small piece of sal ammoniac dissolved in two tablespoonfuls of spirits of wine, and the same quantity of water. Saturate a small piece of sponge or linen rag, and place it between the toes, changing it twice a day. This will cause the skin to harden, and the corn may be easily extricated.

4. Soak the feet well in hot water before going to bed, then pare down the corn, and, after having just moistened it, rub a little lunar caustic on the corn and just around the edge, till it turns light gray. By the next morning it will be black, and when the burnt skin peels off it will leave no vestige of the corn underneath. Of course, the corn is liable to return, but not for some length of time. Or, scrape a bit of common chalk, and put a pinch of the powder on the corn at night, binding a piece of linen round. Repeat this for a few days, when the corn will come off in little scales.

5. For soft corns dip a piece of linen cloth in turpentine and wrap it around the toe on which the corn is situated, night and morning. The relief will be immediate, and, after a few days, the corn will disappear. If corns are soaked in soda and water they will become softened and may be easily removed.

6. Boil a potato in its skin, and after it is boiled take the skin and put the inside of it to the corn, and leave it on for about twelve hours; at the end of that period the corn will be nearly cured.

7. Take quarter cup of strong vinegar, crumb finely in it some bread. Let stand half an hour, or until it softens into a good poultice. Then apply, on retiring at night. In the morning the soreness will be gone and the corn can be picked out. If the corn is a very obstinate one, it may require two or more applications to effect a cure.

Corn Plasters.—In a piece of card, cut a round hole the size of the central portion of the corn; lay the card on a piece of adhesive plaster, and warm the spot of plaster exposed by the hole in the card, by holding a hot iron near it for a second or two; then remove the card and sprinkle some finely powdered nitrate of silver on the warm spot of

the plaster. When cold, shake off the loose powder, and apply to the corn. Two or three applications seldom fail to cure.

Corn-cribs (Rat-Proof).—Take posts ten or eleven feet long and eight inches square; mortise two feet from one end; for end-sills, two-inch mortise with tusk. Taper posts from sill to the end, by hewing off inside until the end is reduced to four inches diameter; make smooth with the draw-knife, and nail on tin smooth half way to the end, below the sill. Let sills be eight inches square, also end-tie them and the rafter-plates strong with moderate inter-ties. Brace well, and lath up and down with three-quarter-inch lath; dove-tail or counter-sink joints crosswise; lay the floor, and board up the ends with un-grooved boards; let each bin be twelve feet long, six feet wide at the sill, and seven and one-half feet at plate; and, if full to peak, it will hold two hundred and fifty bushels. If preferred, lay the floor with lath or narrow boards, with room for ventilation. Each post should stand on stone, and be about three inches from the ground, and each stone have a foundation two feet square and below the frost.

Corn—to prevent being destroyed.—To prevent the corn being destroyed or eaten by chickens, birds, or insects, before it grows through the surface of the soil, prepare the seed before planting by sprinkling a sufficient portion of coal tar, procured at the gas manufactory, through it, stirring so that a portion will adhere to each grain; then mix among the corn some ground plaster of Paris, which will prevent the tar from sticking to the fingers of those who drop the corn, and vegetation will be promoted thereby. The tar and plaster will not injure the corn so as to prevent its growing, by being kept some days after it is so mixed together.

Corn, Beans, etc.—to can.—After stripping off the husks and picking off the silk, slice off carefully about half or two-thirds of the corn, with a sharp knife; then, with the back of the blade, press or scrape off that part of the kernels left on the cob. This prevents cutting of the cob. Fill the can about one-third, and with the small end of a potato masher, or other stick, gently pack it down; put in more corn and pack again, and continue until the can is full to the very top. Put on the rubber, and screw the top on very tight. Put some cloth, hay or straw in the bottom of the wash boiler and on it set (or lay) the filled cans. Fill the boiler with cold water, being careful to cover the cans with it; set over the fire, and boil for three hours or more. Do not fear that the cans will burst, even if very tightly screwed down. When you take them out, try if it is possible to screw the cover on more securely. After the jars are cool, wrap each one in paper, and set away in the dark. This is essential. This process succeeds perfectly, absolutely without a failure. Succotash is put up in the same way, and so are green beans and string beans. Peas you cannot pack—shake down very closely—put on rubbers, screw on cover, and boil in the same manner as directed for the corn. They will shrink in the can—corn will not if packed hard.

Corn—to can in glass jars.—Take the best sweet corn for table

use; when tender, cut from the cob before cooking; put in glass jars, and with the small end of the potato-masher pack it tight; when full put on the rubber and screw on the cover almost tight; place cloth on the bottom of the wash boiler; lay in the cans, one over another; cover with cold water; when it comes to a boil, boil three hours; take out and screw on the covers perfectly tight. If the covers are not tight enough, then boiling water will get in. Corn put up in this way is as well as in summer—all the flavor is preserved and there is no trouble in keeping.

Corn—to can in tin cans.—Get cans made that require to be soldered. Cut the corn off the cob and fill the cans within three-quarters of an inch of the top. Do not pack the corn. Then pour in water until the corn is covered. Then put the cap on and solder it up perfectly air tight. Put the cans in a kettle and boil them two and a half hours. Then take them out and punch a hole in the top of the can; a hole the size of a large pegging-awl will do. Let them set until all the steam has passed out, which requires about five minutes. Then stop up the hole with solder, and put them in the kettle and boil them two and a half hours again. Then put the cans in a cool, dark place, and they will keep well.

Corn (Hulled).—Old-fashioned people look upon hulled corn as a luxury. It should be more common than it is as a wholesome acceptable food. Hulled corn is the Northern equivalent of hominy or samp. In one case the hull is removed by means of ley and in the other by beating or other mechanical means. In the course of hulling, the corn doubles in bulk. White, flinty corn is prefered. Take hard-wood ashes equal in measure, to the corn, pour on twice as much water, in an iron kettle, and boil for several minutes. Skim off whatever rises and allow the dregs to settle. This will take place sooner if a little cold water be added, Pour off the clear ley, wash the kettle, put in the corn with the ley and boil briskly for half an hour, adding water to make up the loss by evaporation, and stiring frequently. Pour off the ley and rinse the corn in several waters. Place the corn with water in a large pan and rub it through the hands to remove any remaining hulls and the black "chits." Continue to wash in successive waters, until that which is poured off is clear. Then cover the corn with water and boil slowly until quite soft, stirring frequently and adding hot water to make up any loss. When quite soft, add a large tablespoonful of salt to each six quarts of the hulled corn. Hulled corn is eaten cold with milk or with sugar and cream, or hot with butter. It will keep in cold weather for several days.

Corn—for seed.—Always select even-rowed ears, and ears whose rows are straight and regular on the cob. Ears that taper are the best because better protected by the husks, and then, too, the silk—the female part of the plant—remains alive longer. The reason for selecting the top ear for seed is that it is always more fully developed, more uniform and more vigorous in its germination, having been better fertilized when in the silk.

Corn Starch—to manufacture.—The corn is steeped in water, ranging in temperature from seventy degrees to one hundred and forty degrees Fahrenheit, for about a week, changing the water at least once in twenty-four hours. A certain amount of acid fermentation is thus produced, causing the starch and refuse of the corn to be easily separated afterward. The swollen corn is ground in a current of clear soft water, and the pulp passes through sieves, with the water into vats. In these the starch gradually settles to the bottom, the clear water is then run off by a tap, and the starch gathered and dried in a proper apartment for the purpose.

Cosmoline—use of.—Cosmoline is soothing when the skin is broken and keeps better than ordinary salve. The plaster will come in play for cuts, and a little collodion brushed over it makes it waterproof, so that it need not be disturbed until the new skin has formed beneath it.

Costiveness—to cure.—Common charcoal is highly recommended for costiveness. It may be taken either in tea or tablespoonful, or even larger doses, according to the exigencies of the case, mixed with molasses, repeating it as often as necessary. Bathe the bowels with pepper and vinegar. Or take two ounces of rhubarb, add one ounce of rust of iron, infuse in one quart of wine. Half a wineglassful every morning. Or take pulverized blood-root, one dram; pulverized rhubarb, one dram; Castile soap, two scruples. Mix and roll into thirty-two pills. Take one morning and night. By following these directions it may perhaps save you from a severe attack of piles, or some other kindred disease.

Cotton Goods—to cleanse.—Add to hot rain water an amount of wheat bran equal to one-eighth of the fabric to be cleansed, and, after stirring well for five minutes, add the goods; stir them about with a clean stick, and bring the whole to a boil. Allow the mixture to cool until the articles can be washed out, after which rinse them well.

Cottons (Colored)—to wash.—Boil two quarts of bran in water for half an hour, let it cool, then strain it, and mix the liquor with the water in which the things are to be washed. They will only require rinsing, as the bran will stiffen them sufficiently. For colored muslins, rice-water is very good, as it helps to preserve the color; but, although it makes white muslins clear, it sometimes gives them a yellow tinge. When used it should previously be boiled in the proportion of one pound of rice to one gallon of water. No soap is required.

Cotton Fabrics—to render fire proof.—If a teaspoonful of powdered borax is added to every pint of starch used in starching cotton goods, they cannot be made to burn with a blaze. The borax can have no injurious effect upon the cloth or upon the wearer, and is so cheap that every one can afford it.

Cough Compound.—For the cure of coughs, colds, asthma, whooping-cough, and all diseases of the lungs: One spoonful of common tar, three spoonfuls of honey, the yolk of three hen's eggs, and half a

pint of wine; beat the tar, eggs and honey well together with a knife, and bottle for use. A teaspoonful every morning, noon and night, before eating.

Cough (Consumptive)—to cure.—Take three pints rain water, half a pound of raisins chopped fine, three tablespoonfuls flax seed; sweeten to a syrup with honey, and boil down to a quart. Add three teaspoonfuls of extract of anise seed. Take a tablespoonful eight times a day.

Cough Candy (Medicated.)—To five pounds of candy just ready to pour on the slab, add the following mixture, and form it into sticks: Tincture squills, two ounces; camphorated tincture of opium and tincture of tolu, of each one-half ounce; wine of ipecac, one-half ounce; oils of gaultheria, four drops; sassafras, three drops; and of anise seed oil, two drops, and use this freely in common coughs.

Cough Drops.—Four teaspoonfuls of castor oil, four teaspoonfuls of molasses, one teaspoonful of camphor, and one teaspoonful of paregoric. Mix together and take a teaspoonful at a dose four or five times a day. Mothers, try this; a month old baby can take a few drops; six months', a half teaspoonful, and a year old, a spoonful. When a child has a cold, and threatened with croup, begin giving the syrup during the day, and on going to bed. If it coughs during the night, give more. It will not fail to prevent croup and cure a cough. A grown person can take a larger dose.

Cough (Dry)—remedy for.—Take of powdered gum arabic, half an ounce; liquorice-juice, half an ounce. Dissolve the gum first in warm water, squeeze in the juice of a lemon, then add of paregoric two drams; syrup of squills, one dram. Cork all in a bottle and shake well. Take one teaspoonful when the cough is troublesome.

Cough Cure.—An infallible cure for a cough or bronchitis. Well tried and proves true: Tincture of tolu, four drams; tincture of opium, two drams; tincture of lobelia, four drams; syrup of squills, one ounce; tincture of tar, two drams; syrup, wild cherry, one pound; syrup of Ipecac, one ounce; glycerine, five ounces; mix. Take one teaspoonful three times a day.

Cough—to alleviate.—For a cough or tickling in the throat take the juice of two lemons, the beaten white of one egg, enough powdered or granulated sugar to make a thick paste. A teaspoonful of this mixture will allay the irritation and cure a cough in its early stages.

Cough—to cure.—Roast a lemon very carefully without burning it; when it is thoroughly hot, cut and squeeze into a cup upon three ounces of sugar, finely powdered. Take a teaspoonful whenever your cough troubles you. It is as good as it is agreeable to the taste.

Cough Mixture—reliable.—Take two ounces of balm of gilead buds, the freshest you can procure, and boil them very slowly in a quart of water. Let it simmer down to one pint, then strain it, and then add one pound of honey in comb, with the juice of three lemons.

Let them all boil together until the wax in the honey is dissolved. This has been known to cure a cough of long standing.

Cough Mixture.—Paregoric, one ounce; tincture of tolu, one ounce; spirits of nitre, one ounce; antimonial wine, eighth of an ounce. A teaspoonful of this mixture is a dose.

Cough Syrup.—Put one quart hoarhound to one quart water, and boil it down to a pint; add two or three sticks of licorice and a tablespoonful of essence of lemon. Take a tablespoonful of the syrup three times a day, or as often as the cough may be troublesome.

Cough—simple remedies for.—1. For a tight, hoarse cough, where phlegm is not raised, or with difficulty, take hot water often, as hot as can be sipped. This will be found to give immediate and permanent relief.

2. Try gum arabic. Keep a piece in the back part of the mouth until the irritation is allayed. It is very healing as well as nutritious, and does not disarrange the stomach as sweet cough mixtures do.

3. A small piece of resin, dipped in the water which is placed in a vessel on the stove, will add a peculiar property to the atmosphere of the room, which will give great relief to persons troubled with cough. The heat of the water is sufficient to throw off the aroma of resin.

4. A medical authority recommends a little common sugar as a remedy for a dry hacking cough. If troubled at night or on first waking in the morning, have a little cup on a stand close by the bed, and take half a teaspoonful; this will be of benefit when cough-syrups fail.

Cough (Whooping) treatment.—Dissolve a scruple of salt of tartar in a gill of water; add to it ten grains of cochineal; sweeten it with sugar. Give to an infant a quarter teaspoonful four times a day; two years old, half spoonful; from four years, a tablespoonful. Great care is required in the administration of medicines to infants. We can assure paternal inquirers that the foregoing may be depended upon.

Coughs—to relieve.—It is said that a small piece of resin dipped in the water which is placed in a vessel on a stove, not an open fireplace, will add a peculiar property to the atmosphere of the room which will give great relief to persons troubled with a cough. The heat of the stove is sufficient to throw off the aroma of the resin, and gives the same relief that is afforded by the combustion, because the evaporation is more durable. The same resin may be used for weeks.

Court Plaster.—This plaster is merely a kind of varnished silk, and its manufacture is very easy. Bruise a sufficient quantity of isinglass, and let it soak in a little warm water for twenty-four hours; expose it to heat over the fire till the greater part of the water is dissipated, and supply its place by proof spirits of wine, which will combine with the isinglass. Strain the whole through a piece of open linen, taking care that the consistence of the mixture shall be such that, when cool, it may form a trembling jelly. Extend a piece of black or flesh-colored silk on a wooden frame, and fix it in that position

by means of tacks or twine. Then apply the isinglass (after it has been rendered liquid by a gentle heat) to the silk with a brush of fine hair (badger's is the best). As soon as this first coating is dried, which will not be long, apply a second; and afterward, if the article is to be very superior, a third. When the whole is dry, cover it with two or three coatings of the balsam of Peru. This is the genuine court plaster. It is pliable, and never breaks, which is far from being the case with spurious articles sold under that name.

Court Plaster.—Brush silk over with a solution of isinglass, in spirits or warm water, dry and repeat several times. For the last application apply several coats of balsam of Peru. Used to close cuts or wounds, by warming it and applying. It does not wash off until the skin partially heals.

Cover—for a lounge.—A serviceable cover to throw over a lounge or couch in the sitting-room is made by taking a broad, bright stripe of cretonne; on each side of this put a stripe of black or dark brown cloth (line to give body to it); on each edge put a row of fancy stitches in silk or crewel; the ends may be finished with fringe or not, as you choose. Another cover is made of the drab Aida canvas, with the ends worked in loose overcast stitches. The canvas may be fringed out to any length desired if you take the precaution to overcast the edge where you stop raveling, to prevent its fraying out to a greater depth than you care to have it.

Cow—to relieve from choking.—When a cow is choked with a potato or a piece of root in the throat, and it cannot be reached or caught by two fingers of the hand inserted in the throat, the best means of relief is rather to crush the obstacle by placing a block of wood on one side of the throat against it, and striking a sharp blow on the other side with a wooden mallet. This will smash the potato, apple or root, and the cow can swallow it.

Cow (swelled bag)—to cure.—An excellent remedy for swelled bags in cows, caused by cold, etc., is gum camphor, one-half ounce, to sweet oil, two ounces; pulverize the gum, and dissolve over a slow fire.

Cow (kicking)—to cure.—To cure a cow of the habit, put a common garden hoe end in front of her off hind leg, and above and behind the gambrel joint of the nigh hind leg. Then sitting down on the right to milk, put the handle of the hoe well up under the arm, and begin milking. The heifer cannot stir either hind leg, and after one week she can be milked safely without fettering.

Crab-apple (Sweet Spiced)—to can.—Select large ones, cut out the blows. One pint of vinegar, one-half pint of water, five pounds of sugar, one tablespoonful each of whole cloves, stick cinnamon, whole allspice, and one half teacup of mustard seed. Cook the syrup a few minutes. Put few apples in at a time; skim out as soon as soft into a jar, then turn the syrup over all. For one peck of apples. I also can crab-apples as I do strawberries, or preserve them whole, pound for pound.

Crackers (Oatmeal).—Wet one pint of fine oatmeal with one gill of water; work it a few minutes with a spoon, until you can make it up into a mass; place it on a board well covered with dry oatmeal; make it as compact as you can, and roll it out carefully to about one-sixth of an inch in thickness, and cut into squares with a knife, or into shapes with a cake-cutter. Bake in a very slow oven, or merely scald them at first and then let them stand in the oven until they dry out. These are difficult to make at first, but you soon learn to handle the dough and to watch your oven so that they will not scorch. They are excellent for all the purposes of crackers, and if kept dry, or if packed in oatmeal, they will last good for months. This is one form of the Scotch "bannock." A rich addition is two heaping spoonfuls of ground dessicated cocoa-nut.

Cramp—in bathing.—For the cure of the cramp when swimming, Dr. Franklin recommends a vigorous and violent shock to the part affected, by suddenly and forcibly stretching out the leg, which should be darted out of the water into the air if possible.

Cranberry Sauce.—To make nice cranberry sauce the berries, after being thoroughly washed, should be put into a sauce-pan (porcelain, never iron or tin), with a quart of boiling water to each quart of berries, and boil rapidly for twenty minutes, mashing the berries with a strong wooden spoon or masher. Then add two teacupfuls of sugar for each quart of berries, stir well, let it boil up, and then pour into a dish to cool. It should be very cold when served. We always pass the stewed fruit, after cooling a little, through a course sieve, and return to the sauce-pan before adding the sugar, let it just come to a boil, stir in the sugar and boil gently three or four minutes. Then pour into moulds or in a pretty glass dish. If one serves the berries in this way once she will never use them without ridding them of the tough and indigestible skins, which really never should be eaten, Long cooking spoils both color and flavor, and not only for cranberry but for apple sauce as well.

Crape—to make old look nearly equal to new.—Place a little water in a teakettle, and let it boil until there is plenty of steam from the spout; then, holding the crape in both hands, pass it to and fro several times through the steam, and it will be clean and look nearly equal to new.

Crape (Black)—to remove water stains from.—When a drop of water falls on a black crape veil or collar, it leaves a conspicuous white mark. To obliterate this, spread the crape on a table (laying it on a large book or paper to keep it steady), and place underneath the stain a piece of old black silk. With a large camel's-hair brush, dipped in common ink, go over the stain, and then wipe off the ink with a small piece of old soft silk. It will dry immediately, and the white mark will be seen no more.

Cream (Cold)—to make.—One-half ounce of white wax; one-half ounce of spermaceti, three ounces oil of almonds, one ounce of glycerine, two ounces of rose water. Melt the first four ingredients

gently together, and when nearly cold, stir in the rose water and a few drops of attar of roses.

Cream Cheese from Buttermilk.—Put the buttermilk in a kettle over the fire and heat slowly until it curdles, but do not let it get warmer than will be pleasant to the hands when placed in it. Remove from the fire and let it set on the back of the stove till the curd separates from the whey, then strain through a sieve or bag. Work the curd fine with the hands, salt it a very little, and then put in cream, mixing it thoroughly.

Cream (Fruit).—Take one-half ounce of isinglass dissolved in a little water, then put one pint of good cream, sweetened to the taste; boil it. When nearly cold lay some apricot or raspberry jam on the bottom of a glass dish and pour it over. This is most excellent.

Cream (Italian).—Melt three-quarters ounce of isinglass in half pint of milk; put a stick of cinnamon and a small piece of lemon peel in it; into one pint of rich cream put some granulated sugar, the juice of three oranges, and a glass of brandy; whisk them up well, and then strain the isinglass in it when cold and whip them all together; when it gets thick, put ina mold; place on ice in a very cool place.

Cream (Lemon).—Take a pint of thick cream and put in it the yolks of two eggs, well beaten; four ounces of fine sugar, and the thin rind of a lemon; boil it up, then stir till almost cold; put the juice of a lemon in a dish or bowl and pour the cream upon it, stirring till quite cold.

Cream (Raspberry).—Put six ounces of raspberry jam to one quart of cream, pulp it through a lawn sieve, add to it the juice of a lemon and a little sugar, and whisk it till thick. Serve it in a dish or glasses.

Cream (Strawberry).—One pint fresh strawberries sprinkled with half ounce of white powdered sugar. Let stand for a time to draw out the juice, then pass through a sieve with a wooden spoon; put half ounce gelatine into a stew-pan, with half a gill of cold water to soak and swell; then put on the fire and stir until the gelatine is melted. Add two ounces powdered sugar and juice of one lemon. Put this mixture through a strainer, and stir into the strawberries. Whip half a pint of cream to a stiff froth, and add also. Scald a pint mold with hot water and rinse with cold. Pour the strawberry cream into the mold, and place it on ice until required for use.

Cream (Salmon).—Take out the contents of a pint can, and remove all bits of skin and bone, drain off the fluid, and mince the fish fine. For a white sauce, boil a pint of milk, thicken with two tablespoonfuls of corn starch, and add two tablespoonfuls of butter, with salt and pepper to one's liking. Prepare one pint finely powdered bread crumbs. Put a thin layer of crumbs in bottom of a pudding dish, then a layer of the minced fish, then a layer of the white sauce. Repeat these layers for whole, ending with crumbs. Then bake in the oven until the top crumbs are a handsome brown. This is a delicious

and nourishing dish for breakfast or tea, and is served as a fish course at dinners.

Cream (Tapioca).—At night put two heaping tablespoonfuls of tapioca to soak, and in the morning drain off the water, beat the yolks of two eggs with half a cup of sugar, a little nutmeg, and the tapioca; stir into a quart of boiling milk, and boil about ten minutes, then pour into a dish. Beat the whites of the eggs to a froth with a little sugar, flavor with lemon or vanilla, spread smoothly over the cream, and put into the oven and brown. Eat cold.

Crib-biting—remedy for.—Crib-biting is often a habit, but may be caused by disease. Indigestion occasions a constant irritation and uneasiness, which may impel the horse to take hold with the teeth and stretch the neck as a means of relief. From this grows the habit of crib-biting and wind-sucking, which ceases when the cause is removed. As a remedy, give the horse in his feed, daily, for a few weeks, one dram of copperas and half an ounce of ground ginger, and feed him upon cut feed, with crushed or ground grain, and an ounce of salt in each feed.

Cribbing—to prevent.—Cribbing is a vice which springs from habit more than any other cause. It begins frequently from a desire to ease the teeth from inconvenience or perhaps pain, at that period when the dentition is perfecting, and then becomes fixed upon the horse as a vice. It is not injurious except when accompanied with wind-sucking, which is a series of deep inspirations by which flatulence and bellyache are caused. When the habit is fixed on a horse it is difficult to break it, and the only effective method is to use a muzzle which prevents him from thus using his teeth.

Crockery—to mend.—Take four pounds of white glue, one and a half pounds dry white lead, one-half pound isinglass, one gallon soft water, one quart alcohol, one-half pint white varnish; dissolve the glue and isinglas in the water by gentle heat if preferred; stir in the lead, put the alcohol in the varnish, and mix the whole together.

Crops per Acre—to estimate.—Frame together four light sticks, measuring exactly a foot square inside, and, with this in one hand, walk into the field and select a spot of fair average yield, and lower the frame square over as many heads as it will inclose, and shell out the heads thus inclosed carefully, and weigh the grain. It is fair to presume that the proportion will be the 43.560th part of an acre's produce. To prove it, go through the field and make ten or twenty similar calculations, and estimate by the mean of the whole number of results. It will certainly enable a farmer to make a closer calculation of what a field will produce than he can by guessing.

Croup—cure for.—The following treatment is recommended as a cure for croup: As soon as the first symptoms are discovered, apply cold water suddenly and freely to the neck and chest with a sponge, then lay a cloth wet with cold water, on the chest, and closely cover with cotton batting (nothing else will do as well), and the breath will be instantly relieved. Give the patient plenty of cold water to drink,

and cover it warm in bed, and it will sleep sweetly. There is no danger of taking cold by the operation.

Croup—treatment and cure.—There are various remedies for this enemy in the nursery. As in other diseases, prevention is better than cure. Children liable to croup should not play out of doors after three o'clock in the afternoon. If a woolen shawl is closely pinned around the neck of the patient when the first symptoms of croup appear, the attack may be diminished in power. The child struggling for breath naturally throws its arms out of bed to breathe through its pores, and thus takes more cold and increases its trouble. Bi-chromate of potassa in minute doses—as much as will rest on the point of a penknife—given every half hour till relief is obtained, is the best remedy we have ever tried. Mustard plasters on the ankles, wrist and chest will draw the blood from the throat and relieve it, cloths wrung from hot water and placed about the throat and chest and wrapped in flannel, give relief. A teaspoonful of alum, pulverized and mixed with twice its quantity of sugar, to make it palatable, will give almost instant help. Another remedy is the following: Take equal parts of soda or saleratus and syrup or molasses; mix and give a teaspoonful for a child two years old, larger doses for older children, smaller for nursing babies. Repeat the doses at short intervals until the phlegm is all thrown up, and upon each recurrence of the symptoms; or, grate a raw onion, strain out the juice, and to two parts of the juice put one part of castor oil; keep it well corked in a bottle, shake well, give one teaspoonful once in two or three hours; or, take two parts sweet lard and six parts pulverized sugar, mix thoroughly, and give a teaspoonful every fifteen minutes until relief is obtained. Among the many remedies given we hope that one or more may be available to every mother who needs aid in this matter.

Croup—remedies.—1. First, get a piece of chamois skin, make a little bib, cut out the neck and sew on tapes to tie it on; then melt together some tallow and pine tar; rub some of this in the chamois and let the child wear it all the time. My baby had the croup whenever she took cold, and since I put on the chamois I have had no more trouble. Renew with tar occasionally.

2. One of the best cures for croup, and one which is always at hand, is to dip strips of flannel in very hot water and then bind tightly about the throat. Remove as soon as cold, and apply others. A cold in the chest can also be cured by wetting several thicknesses of flannel in hot water and laying it upon the chest.

3. Croup can be cured in one minute, and the remedy is simply alum and sugar. The way to accomplish the deed is to take a knife or grater and shave off in small particles about a teaspoonful of alum; then mix it with twice its quantity of sugar, to make it palatable, and administer it as quick as possible. Almost instantaneous relief will follow.

4. In croup or lung trouble, where there is difficulty in breathing,

slake lime, and let the patient inhale the steam. This has cured membranous croup and given great relief in lung trouble.

Croquettes (Chicken).—Have ready a coffeecupful of cold chicken, either roast or boiled, and chopped to the most complete fineness. Take a piece half the size of an egg of the best butter and let it heat to bubbling point over the fire. Stir into it a spoonful of milk and enough flour to make it of the consistency of drawn-butter sauce. Then when thoroughly cooked add a beaten egg and the chopped chicken and pepper and salt to taste. Spread it out on a platter to the thickness of a little less than an inch. Let it get cold. Then when wanted, form the croquettes with the hands, dip them in cracker crumbs, and fry in hot lard. A wire basket which can be dipped into the lard is good to fry croquettes in. This recipe can be used for any kind of cold meat or poultry, also for lobster. The mixture must be moist. The quantities given above will make enough croquettes for a moderate sized family.

Crumpets.—One cup of sweet milk, one cup of buttermilk, one egg, half a teaspoonful of soda, a pinch of salt; flavor and sugar to taste. Make the batter a good deal thicker than for pancakes; bake on a griddle. The crumpets will keep for a week, and improve in keeping.

Crystalized Chimney Ornaments.—Select a crooked twig of white or black thorn; wrap some loose wool or cotton around the branches, and tie it on with worsted. Suspend this in a basin or deep jar. Dissolve two pounds of alum in a quart of boiling water, and pour it over the twig. Allow it to stand twelve hours. Wire baskets may be covered in the same way.

Cucumber Vines—to make bear fine crops.—When a cucumber is taken from the vine let it be cut with a knife, leaving about the eighth of an inch of the cucumber on the stem, then slit the stem with a knife from its end to the vine leaving a small portion of the cucumber on each division, and on each separate slip there will be a new cucumber as large as the first.

Curculio in Fruit Trees—remedy for.—Sawdust saturated in coal oil, and placed at the roots of the tree, will be a sure preventive; or, clear a circle around the tree from all rubbish; fill up all little holes and smooth off the ground for a distance of at least three feet each way from the tree, then place chips or small pieces of wood on the ground within the circle; the curculio will take refuge in large numbers below the chips, and you can pass around in the mornings and kill them off.

Currant Worms—to destroy.—The last two seasons my currant bushes were entirely stripped of leaves by the worms, leaving nothing but the bare fruit, and that of poor quality. This year I put about one pound of coarsely ground quassia wood into ten or fifteen gallons of water, and after stirring in two or three times, applied it with a watering-spout, by sprinkling the bushes every morning for several

days. The result is a plentiful crop of leaves, and fruit of an excellent quality. Water may be added as long as bitterness remains.

Currants and Gooseberries—to insure a good crop.—Put one pint of salt and one pint of soft soap (it ought to be farmer's soap) to ten gallons of water, and use it on currants and gooseberries. I'll warrant them a full crop. Put plenty of ashes—coal or wood—around the roots to increase the size of the berries.

Curry Powder—to make.—(This is the genuine East India recipe): Take the fennel seed, cummin seed, and coriander seed each four ounces, with two ounces of caraway seed, dry them before the fire, then grind and sift them, add to this two ounces of ground turmeric and the same of ground black pepper, one ounce of ground ginger, and half an ounce of Cayenne pepper. Mix well and keep dry and well stopped.

Curtains—for bedrooms, etc.—A very stylish and graceful design for sitting room or bedroom curtains recently originated in the New York art rooms, and full directions are given here for making a pair. The curtains are inexpensive, the full cost for two deep windows being about $3.50. The materials required are two yards of cretonne, ten or twelve yards of cheese cloth, and sufficient lace for finishing the front edges of the curtain and making an insertion across the top of each. Be careful in purchasing the cheese cloth to get a piece which is evenly woven, and without black threads. Scrim may be used instead of cheese cloth, if preferred, but it is more expensive. In buying the cretonne get two patterns which harmonize, buying one yard of each. Cut each yard in four pieces, lengthwise. Each curtain has two pieces at the top, with an insertion of lace in between. One curtain only will be described. Of each pattern of cretonne take one piece, stitch the lace insertion between them, turn down the edge—about an inch—of the one intended for the top of the curtain, and stitch the cheese cloth on the other piece with a pudding-bag seam. Make a hem twelve inches deep on the bottom of the curtain. The lace for the curtain should be about four inches wide. Lay the lace flat on the right side of the curtain, an inch from the edge, with the straight edge of the lace toward the selvage, and the pointed edge turning backward. Stitch it on, fold down the hem on the wrong side, and catch it fast with long stitches. Cut a V-shaped piece out of the lace at the lower corner of the curtain, seam the lace together, and sew it across the bottom of the curtain.

Curtains (Lace)—to laundry.—Lace curtains should never be ironed—nor even the embroidered muslin ones. Have two narrow, slender boards, as long or longer than your curtains. Tack strips of cloth or wide tape the entire length of these. Place them out doors upon chairs, as you would quilting frames, and carefully pin the wet curtain between—stretching it until it is entirely smooth. Every point, every scallop should be pulled in shape and fastened down. It takes but little time for it to dry, and then its place should be filled with another. Housekeepers often stretch a sheet on the carpet of

some unused room, and then pin the curtain to the floor, but the above method is greatly preferable.

Curtains (Silk Rag)—to make.—Cut the silk into strips about half an inch wide (a little more or less makes no difference), either straight or on the bias. Sew the pieces together strongly, and roll into balls, keeping each color and shade by itself. Pieces of narrow ribbons, old cravats and sashes, old waists of dresses—in fact, every scrap of silk can be made use of whether soiled or fresh. After making a number of balls send them to a rag-carpet weaver, who will weave them for about twenty-five cents a yard. It will take one and one-half pounds of silk to make a yard of material three-quarters of a yard wide, which is the width of nearly all looms. If the balls of silk are given to the weaver with directions how to place the colors, and the width the stripes are desired, the stuff when finished will have a very handsome effect, and is very heavy. It is suitable for portieres, curtains, rugs, or tablecloths.

Curtains (Window)—cheap and handsome.—Really charming bedroom curtains can be made of unbleached muslin sheeting with a simple hem upon the edge. All the trimming required is a strip of bright chintz or cretonne, a foot in width, stitched horizontally across the top about two feet from the cornice. The light falling through the unbleached muslin gives the fine ecru tone so much in vogue at the present, and it is impossible to detect the nature of the fabric without close examination. The effect is precisely that of the fine twilled India material so much admired when combined with strips of oriental embroidery. Really beautiful curtains for a parlor can be made of canton flannel in the same way, and the effect produced is that of a rich cream-colored plush or velvet. It is impossible to judge of the beauty of these cheap and novel hangings without having seen them.

Custard (Apple)—to make.—Six tart apples, half teacupful of water, four spoonfuls of sugar, three pints of milk, eight eggs. Pare and core the apples, cook them in the water till tender, but do not let them break, put them in the pudding dish and sprinkle sugar over them; then make a custard of the milk, sugar and well-beaten eggs; flavor to taste; pour this over the apples, and bake in a moderate oven about half an hour.

Custard (Boiled).—Heat one quart of milk to near boiling, add two tablespoonfuls of corn starch previously dissolved in a little cold milk; add two well beaten eggs, four tablespoonfuls of white sugar; let it boil up once, stirring all the time; flavor to suit.

Custard (Chocolate Cream).—Scrape quarter of a pound of the best chocolate, pour on it a teacupful of boiling water, and let it stand by the fire until it is all dissolved. Beat eight eggs light, omitting the whites of two; stir them, by degrees, into a quart of rich milk alternately with the chocolate and three tablespoonfuls of white sugar. Put the mixture into cups and bake ten minutes.

Custard (Orange).—The juice of six oranges strained and sweet-

ened with loaf sugar; stir over a slow fire till the sugar is dissolved, take off the scum; when nearly cold add the yolks of six eggs, well beaten, and a pint of cream or milk. Return to the fire and stir till it thickens, pour into glasses and serve when cold.

Custard (Rice).—One quart of milk, three eggs, well beaten, four tablespoonfuls of sugar, one tablespoonful of butter, one cup of boiled rice, a little salt, half the grated rind of a lemon. Boil the rice, drain, and stir while hot into the milk. Beat the eggs well, rub the butter and sugar to a cream with lemon peel and a little salt, and stir into the warm milk. Mix well and bake in a buttered dish in a brisk oven. Eat warm or cold. We like it better warm, with a little cream poured over it when served in saucers.

Custard—without milk.—Add to one pint of water two heaping spoonfuls of flour, boil well, and when cold, add one egg, piece of butter half the size of an egg, one cup of sugar, salt to taste, and flavor with lemon or vanilla.

Cutting the Hair.—Cutting the hair does not, as generally thought, promote its growth. Most of the specifics recommended for baldness, not excepting petroleum, are mere stimulants, and are seldom or never permananently successful. Some of them give rise to congestion of the scalp. When a stimulant is desirable ammonia is the best. It is safe.

Cuts—how to treat.—There is nothing better for a cut than powdered resin. Get a few cents' worth, pound it until it is quite fine, put it in a cast-off spice box, with perforated top, then you can easily sift it on the cut. Put a soft cloth around the injured member, and wet it with water once in awhile. It will prevent inflammation or soreness.

Cuttings—for mailing.—Let me tell the floral readers how I do up cuttings for mailing. Cut at the leaf joint; trim off the large leaves, put a little damp moss or cotton around them, pack in a tin spice box, being careful to wrap and tie it securely. My cuttings have gone from Massachusetts to California all right.

Dandruff—ways to remove.—1. To remove dandruff take a thimbleful of powdered refined borax (can be had at any druggists), let it dissolve in a teacupful of water; first brush the head well, then wet a brush and apply it to the mixture, and then to the head. Do this every day for a week, and twice a week after for two or three times, and you will effectually remove the dandruff.

2. The annoyance from dandruff can be prevented by dampening the scalp three or four times a week with sulphur water, made by putting a half ounce of flour of sulphur into a pint of water, shaking occasionally for a few days; then pour off into a clean bottle.

Deafness—treatment of.—Take three drops of a sheep's gall, warm, and drop it into the ear before going to bed. The ear must be syringed with warm water in the morning. The gall must be applied for three successive nights. It is only efficacious when the deafness is produced by cold. The most convenient way of warming the gall

is by holding it in a silver spoon over the flame of a light. The above remedy has been frequently tried with perfect success.

Deafness—to relieve.—Put a tablespoonful of bay-salt into nearly a half pint of cold spring water; and after it has steeped therein for twenty-four hours, now and then shaking the phial, pour a small teaspoonful in the ear most effected, nightly, when in bed, for seven or eight successive nights.

2. Digest two ounces of bruised garlic in one pound of oil of almonds for a week, and strain. A drop poured into the ear is effective in temporary deafness.

Decanters—to clean.—Roll up in small pieces some soft brown or blotting paper; wet them, and soap them well. Put them into the decanters about one-quarter full of warm water; shake them well for a few minutes, then rinse with clear cold water; wipe the outsides with a nice dry cloth, put the decanters to drain, and when dry they will be almost as bright as new ones. This is the best and safest mode of cleaning decanters. Some persons, however, use a little fine sand, and others egg-shells crushed into small pieces, which are shaken about in the glass with cold water; a beautiful polish may be given by this means.

Decanter Stoppers—to remove.—Stoppers of glass decanters frequently, from a variety of causes, become so fixed that they cannot be removed without danger. Whenever this is the case, place a little sweet oil with a feather around the stopper and the neck of the decanter, and set it near the fire. When tolerably warm tap the stopper gently on all sides with a light piece of wood, and it will soon become loose; or the neck of the decanter may be rubbed sharply with a piece of list; the friction will expand the glass of the decanter and in this way set the stopper free. Great care must be taken that the stopper is not broken.

Decorating—a lesson in.—Choose a plain, smooth, red-clay flower-pot. If it is rather stupid-looking, all the better. With your box of water-color paints, lay broad bands of dull blue around top and bottom. If you prefer, you can paint the intervening strip black, instead of leaving it red, and the bands may be divided by a narrow line of yellow. Now you are ready for the pictures. If you possess some sheets of little scrap-chromos, you will soon be rid of your task. Select some very odd, grotesque ones that will surprise each other as much as possible—a huge butterfly, tiny Madonna, reptiles, sprays, zebras, and the like. Paste them on in the most disorderly order you can imagine, and your work is complete. Another method is to cut from picture papers a quantity of small designs, being careful to trim them very neatly. Paint these all black, and lay on a dull red or blue ground. Whichever plan you choose, be careful and not decorate too profusely, as that would be quite unlike the Japanese, while it would hint most strikingly of a merry, mischievous little girl.

Deer Skins—to tan for gloves.—For each skin take a bucket of

water and put it into one quart of lime; let the skin or skins lie in from three to four days, then rinse in clean water, hair and grain; then soak them in cold water to get out the glue; now scour or pound in good soap-suds for half an hour; after which take white vitriol, alum and salt, one tablespoonful of each to a skin; these will be dissolved in sufficient water to cover the skin, and remain in it for twenty-four hours; wring out as dry as convenient, and spread on with a brush one-half pint of curriers' oil, and hang it in the sun about two days; after which you will scour out the oil with soap-suds, and hang out again until perfectly dry; then pull and work them until they are soft; and if a reasonable time does not make them soft, scour out in suds again as before, until complete. The oil may be saved by pouring or taking it from the top of the suds, if left standing a short time. The buff color is given by spreading yellow ochre evenly over the surface of the skin when finished, rubbing it well with a brush.

Dentifrice (Charcoal.)—Ingredients: Powdered charcoal, four ounces; powdered yellow bark, two ounces; powdered myrrh, one ounce; orris root, half an ounce. Mix, and flavor with wintergreen.

Dentists' Nerve Paste.—1. Arsenic, one part; rose pink, two parts. To destroy the nerve, apply this preparation on a pledget of cotton, previously moistened with creosote, to the cavity of the tooth, let it remain four hours, then wash out thoroughly with water.

2. Arsenous acid, thirty grains; acetate of morphia, twenty grains; creosote, quantity sufficient for paste. Mix.

Dentists' Emery Wheels.—Emery, four pounds; shellac, one-half pound; melt the shellac over a slow fire; stir in the emery, and pour into a mould of plaster of Paris. When cold it is ready for use.

Dedorizer.—A few pounds of copperas in a bucket of water, poured into sinks or other offensive places, will neutralize unpleasant odors, and destroy unwholesome exhalations.

2. Coffee pounded in a mortar and rosted on an iron plate, sugar burned on hot coals, and vinegar boiled with myrrh and sprinkled on the floor and furniture of a sick-room are excellent deodorizers.

Depilatories—to take off superfluous hair.—1. Lime, twelve ounces; starch, ten ounces; orpiment, one ounce. Mix them together.

2. Sulphuret of arsenic, one ounce; quick-lime, two ounces. This application being virulent poison, must be used but seldom.

3. Orpiment, one ounce; quicklime, nine ounces. Mix with a little soap lees and powdered starch.

4. Quicklime, two ounces; salt of tartar, four ounces; charcoal, a quarter of an ounce.

5. Quicklime, eight ounces; dry pearlash, one ounce; sulphuret of potassium, one ounce. It must not be applied more than two or three minutes.

Dessert (Simple).—Put eight crackers in a deep dish, pour enough warm water or milk over them to just cover them, and when soaked

which will not take longer than ten minutes, sprinkle with sugar, cover with cream, garnish with preserved peaches, pears or quinces, and serve. Try it.

Dessert (Novel).—Here is a novel and pleasing way to prepare a dessert. It is especially adapted for the children's birthday dinners in those happy households where such days are kept as joyous festivals. Make a small hole in the end or side of a number of egg shells. Through this pour out the egg. Fill the empty shells with hot pudding; made of corn starch, arrowroot, or Irish moss. When cold break off the shells; serve on small saucers, and surround the egg-shaped pudding with jelly or jam. If you wish to take so much trouble, divide the pudding in two parts, and add to one a tablespoonful of grated chocolate, and in this way color part of the eggs. Sugar and cream, flavored with vanilla, is a very nice sauce with this kind of pudding.

Diamonds—to test.—The diamond may be distinguished from every other stone by its peculiar virtue of single refraction. Every other precious stone (with the exception of the garnet, from which it can otherwise be readily distinguished) possesses the quality of double refraction; a double image of a taper or small light being given off when it is viewed through their facets. This results from their inferior refracting, and consequently reflecting power. It can also be tested by its superior hardness. Further, if any other of the precious or artificial stones are immersed in alcohol, or even water, they lose their lustre, which the diamond does not. A simple and ready way of distinguishing precious from artificial stones is to touch them with the tongue—the stone being the best conductor of heat will feel cold—the glass much less so. Sir David Brewster invented an instrument to distinguish real gems, called a lithiscope. The usual mode of estimating its value is by its weight in carats (about four grains). If it is a diamond of the first water, free from flaws, and properly cut, its value is as the square of its weight in carats, multiplied by 8; i. e., a diamond of one carat is worth $40; of two carats, $160; of ten carats, $4,000, and so on. Beyond a certain weight fancy prices step in and human credibility requires a long breath. Uncut diamonds vary from $10 to $25 per carat.

Diamonds—to polish.—The plan in use at all the large diamond cutters is simply a cast iron disc of good metal, with a verticle spindle run through its centre, balanced, and turned, and faced true in a lathe. The disc revolves at about one thousand revolutions per minute. With a little diamond dust and oil, the stone is set in a small brass cup filled with common soft solder; it is then screwed up in the clamps and applied to the skive till the facets is formed.

Diarrhœa—remedies for.—1. A most valuable remedy for diarrhœa is burnt rhubarb, given in port wine, milk, or water; from five to ten grains is sufficient for a dose. The manner of preparing it is to burn the rhubarb powder in an iron crucible, stirring it till it is

blackened; then covering it closely in a jar; the drug loses two-thirds of its weight by incineration, and is nearly tasteless.

2. A wineglassful of strong mint tea, with half a teaspoonful of carbonate of soda in it. To be taken three or four times a day.

3. An excellent remedy may be extemporized as follows: Half a teaspoonful of prepared chalk, ten drops of laudanum, a drop of oil of peppermint, in half a wineglassful of cold water.

Diarrhœa—cure for.—It is said the small plant commonly known by the name ruptureworl, made into tea, and drank frequently, is a sure cure for diarrhœa. Ruptureworl grows in nearly every open lot, and along the roads. It is a small plant, throwing out a number of shoots in a horizontal direction, and lying close to the ground, something similar to the manner of the pusleyweed, and bears a small, dark green leaf, with an oblong, purple spot in the centre. When the stem is broken, a white milky substance will ooze from the wound. It is very palatable, and infants take it as readily as any drink. This is an old Indian cure, and may be relied on. The botanical name of this plant is *Euphrobia Maculata*.

Diarrhœa—remedy.—The ingredients are: Sulphate of morphia, one grain; glauber salts, quarter of an ounce; water, two ounces. *Dose:* A teaspoonful twice a day. If attended with much pain and looseness, administer this medicine every two hours.

Diet During Diarrhœa.—Tea without milk, and very little sugar; mutton and chicken broths, or beef tea, thickened with a little flour or arrowroot; boiled rice, tapioca, sago; rice water or toast water to drink. If the attack is severe, or of long continuance, the patient must be kept in bed. The feet must be kept warm, and the covering to suit the feelings of the patient.

Chloride of lime, or Platt's chlorides, or raw carbolic acid must be placed in all chamber receptacles, and everything which passes from the patient removed as soon as possible.

Diuretics—pills, drops, decoctions, etc.—Solidified copaiba, two parts; alcoholic extract of cubebs, one part; formed into pills with a little oil of juniper. Dose, one or two pills three or four times daily. This pill has been found very valuable in affections of the kidneys, bladder, and urethra, as inflammation from gravel, gonorrhœa, gleet, whites, lucorrhœa, common inflammation, etc.

Diuretic Drops.—Oil of cubebs, one quarter ounce; sweet spirits of nitre, one-half ounce; balsam of copaiba, one ounce; Harlem oil, one bottle; oil of lavender, twenty drops; spirits of turpentine, twenty drops; mix. Dose, ten to twenty-five drops, as the stomach will bear, three times daily. It may be used in any of the above diseases with great satisfaction.

Diuretic Tincture.—Green or growing spearmint mashed, put into a bottle, and covered with gin, is an excellent diuretic.

Diuretic for Children.—Spirits of nitre—a few drops in a little spearmint tea—is all sufficient. For very young children, pumpkin seed, or watermelon seed tea is perhaps the best.

Drink for Consumptive Patients.—Ingredients: One teacup of barley water, one-half teacup of new milk, five grains of nitre, sugar candy. Let the barley water be thick, and well boiled, before the other ingredients are added. The drink should be taken just warm, the first thing in the morning and the last at night. If the patient be subject to night perspiration, the last dose should be taken at an earlier hour, or the nitre omitted. This drink, if persevered with, will be found to afford great relief; it is so simple that it will not interfere with any medical treatment.

Diphtheria—cure for.—We publish the annexed recipe from a physician, who says that of one thousand cases in which it has been used not a single patient has been lost. The treatment consists in completely swabbing the back of the mouth of the throat with a wash made thus: Table salt, two drams, black pepper, golden seal, nitrate of potash, and alum, one dram each. Mix and pulverize, put into a teacup, which half fill with boiling water, stir well, and then fill up with good vinegar. Use every half hour, one, two, and four hours, as recovery progresses. The patient may swallow a little each time. Apply one ounce each of spirits of turpentine, sweet oil, and aqua ammonia, every four hours, to the whole of the throat and to the breastbone, keeping flannel to the part.

Diphtheria—cure for.—The following recipe is given by an old gentleman of Charlottesville, Va., who states that he has often known it to be used in cases of diphtheria, and has never known it to fail in effecting a cure: Take a handful of alder root, a handful of dogwood root, a handful of the bark of persimmon root, boil with a pint of vinegar down to a half pint; then add a very little water, a small lump of alum, and a little honey. Let the patient use it frequently as a gargle.

Diphtheria—treatments of.—Diphtheria is scarcely more than a modification of scarlet fever. The patient first complains of lassitude, headache, loss of appetite; is chilly, with flushes of fever, active and quick pulse, a light furred tongue; redness of the back of the mouth, enlargement of the glands of the neck, a hot, dry, pungent skin; and in the second stage an exudation upon the mucous surface of the upper air-passages. This soon becomes organized into a tough, white or gray membrane, covering the soft palate and tonsils. These sometimes degenerate into ulcers. The breathing at this stage becomes hurried and difficult; pulse quick, and frequently the asphyxia ensuing ends in death. It generally reigns as an epidemic, and is regarded by some as contagious.

The very first care should be the throat. Cut pieces of salt fat pork, and cover the throat on each side, to exclude the air and sweat the neck; make a lotion of one teaspoonful of carbolic acid, two teaspoonfuls glycerine, two teaspoonfuls salt, half pint hot water; gargle the throat every half hour; sulphur, desertspoonful to half teacup of water; mix with the finger to be used as a gargle, alternate with the carbolic acid lotion; swab the throat every hour, or often

enough to dislodge the deposits, with equal parts of sulphur and tannic acid in dry powder mixed. Never use the same swab twice; burn it and use a fresh one. Do not let the patient go near an open door or window, or lie in a draft.

A paste made by stirring together the yolk of an egg and table salt is a most excellent application for the throat externally in all cases of inflammation.

Give quinine every four hours to keep up the strength, or, if much fever, every three hours. Give plenty of ventilation, and let the patient partake freely of fruits, both raw and cooked, new milk and cream.

Graham mush, oatmeal gruel, crackers, and soups of beef, chicken, squirrel, etc. If the patches ulcerate use sumac and wild indigo as a gargle.

Diphtheria Cure.—Dr. Chenery, of Boston, has lately discovered that hyposulphite of soda is the specific remedy against diphtheria, that so much dreaded ailment, which of late years has carried off many valuable lives. He reports a very large number of cases saved by the use of this remedy. The dose of the hyposulphite is from five to fifteen grains or more in syrup, every two to four hours, according to age and circumstances. It can do no harm, but if too much is given it will purge; as much as the patient can bear without purging is a good rule in the severer cases. The solution or mixture can be used in doses of five drops to half a dram in milk. The amount for thorough stimulation is greater than can be taken in water. The doctor usually gives it in such doses as can be easily taken in milk, using milk besides as a food for small children. One fact, however, needs to be borne in mind, namely, the hyposulphite prevents the digestion of milk, and it should be given in less than an hour after taking the medicine. They may be used alternately, however, without interference, in sufficiently frequent doses.

Diphtheria Remedy.—The antiseptic treatment of diphtheria by turpentine has recently been introduced in Germany by Bosse, of Domnan. It is given in the same manner as in cases of phosphorus poisoning, that is to say, as pure turpentine, highly rectified, in doses of a soup-spoonful twice a day to adults, a dessert-spoonful to children of more than five years of age, and a teaspoonful to young infants. Milk and wine are given abundantly at the same time. The administration of it causes a sensation of burning in the stomach, epigastric pressure, vomiting and the passage of stools strongly impregnated with turpentine odor. The use of turpentine was suggested by the experiments of Koch, which showed that it had an action on the problematic bacilli of diphtheria. But the treatment itself is much more than problematic.

Diphtheria—remedy and treatment.—The treatment consists in thoroughly swabbing the back of the mouth and throat with a wash made thus: Table salt, two drams; black pepper, golden seal, nitrate of potash, alum, one dram each; mix and pulverize; put into a teacup

half full of water; stir well, and then fill up with good vinegar. Use every half hour, one, two, and four hours, as recovery progresses. The patient may swallow a little each time. Apply one ounce each of spirits turpentine, sweet oil, and aqua-ammonia, mixed, every hour to the whole of the throat, and to the breast bone every four hours, keeping flannel to the part.

Dishes—how to wash.—The right way to wash dishes is to have three pans, one containing warm soap-suds, another warm clean water, and the other hot clear water. First, wash and wipe the glassware; second, the silver, having a plate in the bottom of the pan for the silver to rest on; third, take the dishes, one at a time, wash the side you eat off of in the suds, then place them in the warm, clear water, where there is a clean dish-cloth and wash both sides; then rinse them in the hot water and drain off.

Dishes (Cheap and Excellent)—to cook.—1. Take as many cold hard boiled eggs as are required for the size of the dish; slice them, and cover the dish with a layer of these slices. Over these grate a thick covering of cheese, then another layer of slices of hard egg; dot about a few capers and some finely-chopped hot pickle or chutnee. Over this pour a good thick mayonnaise sauce, and cover all with grated cheese. The mayonnaise sauce may be made as follows: Beat up the yolk of a raw egg and oil, dropped in slowly, to a thick cream. Whisk up the white to the consistency of cream, and mix with it. Flavor with Tarragon vinegar, pepper and salt.

2. Take the remains of any kind of fish that has been previously cooked; bone and well pound it in a mortar with a little butter, pepper and salt to taste, and a little shallot or garlic. Roll it into balls, egg and bread-crumbs, and fry these a golden brown. Serve very hot with slices of lemon. The remains of lobster or crab may be served in the same way.

3. Take as many hard boiled eggs as you require, cut them in halves and scoop out the yolks. Mix the latter with some finely-minced cold chicken, mushroom, shallot, a little lemon-juice, and pepper and salt to taste. Put this mixture into the white halves, pass a piece of thread around them, roll them lightly in egg and bread-crumbs, and fry to light brown.

4. The remains of cold duck or young goose may be made very appetizing in the following way: Mince the flesh up very finely with lemon-juice, a few olives, a little of the seasoning, and some celery-salt. Make a hard crust as for a raised pie, and bake in the oven or boil in a basin. If the latter, serve with it the gravy left from the roast, flavored with a wineglass of red wine.

5. Take a fair-sized fowl, braise it well, and then cut into small pieces. Put it into a stew-pan with a quart of peas, a young good-hearted lettuce cut into quarters, a few spring onions chopped fine, a dozen button mushrooms, and a dessert-spoonful of "Yankee Relish" or Worcestershire sauce. An old fowl answers for this purpose admirably.

6. Stew macaroni until it is quite tender in any kind of brown soup. Serve it in a rather deep dish with rich cheese grated thickly over it.

7. Break three or four eggs into a basin; whisk them to a thick cream. Stir in a tablespoonful of flour, a quart of milk, and two spoonfuls of curry powder. Bake till it rises and serve hot. This curry custard cannot be too strongly recommended.

8. A pie that combines economy with savoriness may find favor with the economically disposed few. Some slices of beef cut very thin, a few thicker bits out of a loin of pork. Line the slices of beef with chopped onion and fine herbs, roll them up and tie with thread. Pack the meat into the dish with a layer of leeks, white beet, and parsley between each layer. Pour a little gravy over the whole, season liberally, and bake under a good light crust.

9. A dish equal to the best steak and cheap enough for any man, is prapared from a shank of beef with some meat on it. Have the bone well broken; wash carefully to remove bits of bone, cover with cold water; watch when the boiling begins and take off the scum that rises. Stew five or six hours till the muscles are dissolved; break the meat small with a fork—far better than chopping—put it in a bread-pan, boil down the gravy till in cooling it will turn to a stiff jelly. When this is done gelatine is quite superfluous. Add salt, and, if liked, other seasoning, and pour it hot upon the meat; stir together and set aside over night, when it will cut into handsome mottled slices for breakfast or supper.

Disinfectant—for sick-rooms.—Let a reliable apothecary put up for you in a small bottle four ounces of ninety per cent. alcohol, and one ounce of thirty-six per cent. nitric acid. One half of this mixture will disinfect a room fifty feet long, thirty feet wide and twelve feet high. One large spoonful of it (one-half ounce) will disinfect a large bedroom containing 1,200 cubic feet of air space. Two teaspoonfuls of it (two drams) will disinfect a bedroom nine feet square and seven and one-half feet high. A teaspoonful (one dram) is sufficient for three hundred cubic feet air space. The method of using the mixture is as follows: Put the quantity to be used in a porcelain capsule (a tea-saucer will do), set a pan of warm water in the room to be disinfected; let the capsule or saucer containing the disinfectant float on the surface of the warm water. The mixture in the capsule or saucer will evaporate by the heat of the water, and the vapor will effectively disinfect. Don't try to evaporate on a stove, over a lamp, or by a fire; mischief would result. Use warm water to effect evaporation and nothing else. Use only porcelain to hold the mixture, for it will corrode metal. It will also spoil a good spoon. Label the bottle "poison," for it would be very dangerous to take it instead of medicine.

Disinfectants.—1. A saturated solution of permanganate of potassa is the best of all disinfectants. Add to twenty-five grains two quarts of water. A tablespoonful of this in a soup plate of water removes

any ordinary smell. No sick-room, especially one in which there is infectious disease, should be without it.

2. Heat a common iron fire-shovel hot, but not quite red-hot, and pour an ounce of carbolic acid fluid on it. The fumes will penetrate the room everywhere and cleanse the air of its impurities. This should be repeated daily so long as it is necessary.

3. The following is a refreshing disinfectant for a sick-room, or any room that has an unpleasant aroma pervading it: Put some fresh ground coffee in a saucer, and in the center place a small piece of camphor gum, which light with a match. As the gum burns allow sufficient coffee to consume with it. The perfume is very pleasant and healthful, being far superior to pastiles, and very much cheaper.

4. From an Italian journal we note that a few drops of the following mixture on a plate will pleasantly disinfect a bedroom: Camphor, twenty; hypochlorite of lime, alcohol and water, of each fifty; eucalyptus and oil of cloves, of each one part. The ingredients must be mixed slowly in a cool, spacious vessel.

5. Cut two or three good-sized onions in halves, and place them on a plate on the floor; they absorb noxious effluvia, etc., in the sick-room, in an incredibly short space of time, and are greatly to be preferred to perfumery for the same purpose. They should be changed every six hours.

Dogs—to remove vermin from.—To remove fleas and lice on dogs, mix soft-soap with as much carbonate of soda as will make it into a thick paste. Then rub this well into the roots of the hair all over the dog's body, adding a little hot water as you go along, so as to enable you to completely saturate the skin with it. Let it remain for half an hour, then put the dog into a tub with warm water for ten minutes, letting him quietly soak, and now and then ducking his head under. Lastly, wash the soap completely out, and let him dry by exercise in the sun, choosing a warm day for the operation. This, after two or three repetitions, will completely cleanse the foulest skin. To prevent vermin from again accumulating, moisten the hair once a week with a teaspoonful of carbolic acid to a half pint of water. Keep his house or resting place and bedding clean and sweet, and sprinkle it occasionally with the last mentioned solution.

Dog-bite—treatment of.—Wash the part thoroughly, then suck it freely; finally touch it all over with lunar caustic. When there is a doubt as to the health of the animal, and the dog is supposed to be mad, the only safe method to prevent the absorption of the poison is to have recourse to the surgeon's knife, by which every particle of the surface with which the saliva of the dog may have come in contact must be cut away.

Doughnuts.—One egg, one cup of sugar, one teaspoonful of butter, one cup of sweet milk, one teaspoonful of soda, two teaspoonfuls of cream tartar.

Doughnuts (Raised).—One pint of milk, one pint of sugar, one pint of yeast or sponge, two-thirds of a pint of shortening, two eggs,

one small teaspoonful of salt, and one teaspoonful of cinnamon. Wet up warm at night, wrap up well, and in the morning roll and cut out, let stand while the fat heats, fry, not too quickly.

Drafts, Bills of Exchange, Acceptances.—A draft or bill of exchange is an order drawn by one person or firm upon another, payable either at sight or at a stated future time.

It becomes an "acceptance" when the party upon whom it is drawn writes across the face "accepted" and signs his name thereto, and is negotiable and bankable, the same as a note, and subject to the same laws.

In many states both sight and time drafts are entitled to three days' grace, the same as notes; but if made in form of a bank check, "pay to," without the words "at sight," it is payable on presentation without grace.

Drills—to temper.—Select none but the finest and best steel for your drills. In making them, never heat higher than a cherry red, and always hammer till nearly cold. Do all your hammering in one way, for if, after you have flattened your piece out, you attempt to hammer it back to a square or a round, you spoil it. When your drill is in proper shape, heat it to a cherry red, and thrust it into a piece of resin or into quicksilver. Some use a solution of cyanuret potassa and rain-water for tempering their drills, but the resin or quicksilver will work best.

Drink—very strengthening.—Beat the yolk of a fresh egg with a little sugar, add a very little brandy, beat the white to a strong froth, stir it into the yolk, fill up the tumbler with new milk, and grate in a little nutmeg.

Drinks—for fever patients.—Drinks made from fresh or preserved fruits are sometimes useful in fevers. Rhubarb tea is a very refreshing spring beverage. Slice about two pounds of rhubarb and boil for a quarter of an hour in a quart of water; strain the liquor into a jug, adding a small quantity of lemon-peel and some sugar to taste; when cold it is fit for use. Apple water may be made in the same manner. The apples should be peeled and cored. Sugar should not be added to either of the above until after the liquor is removed from the fire. In the absence of fresh fruit a pleasant beverage may be prepared by stirring sufficient raspberry jam or current jelly into the required quantity of water, straining the liquor before giving it to the patient.

Dropsy—remedy for.—Take one pint of bruised mustard seed, two handfuls of bruised horseradish root, eight ounces of lignumvitæ chips, and four ounces of bruised Indian hemp root. Put all the ingredients in seven quarts of cider, and let it simmer over a slow fire until it is reduced to four quarts. Strain the decoction, and take a wineglassful four times a day for a few days, increasing the dose to a small teacupful three times a day. After which use tonic medicines. This remedy has cured cases of dropsy in one week's time which has baffled the skill of many eminent physicians. For children the dose should be smaller.

turtles, etc. About the same food that is given turkeys is suitable for young ducks, although they like plenty of green food as well as soft food while young. Worms, flies, bugs, etc., are eagerly shoveled in by them, and relished accordingly, in the absence of which occasional feeds of shreds of well cooked beef—the cheap of all parts will do—come in very nicely to supply the deficiency. Like other young poultry, they require care during the earlier stages of growth and development.

Ducks—quick growth of.—The prejudice against ducks, on account of their extreme voracity, is not well founded, for if they eat enormously when half grown, they increase in weight proportionately. Quick growth is one of the things most desired in animals of all kinds that are raised for the table. If the experiment be tried of rearing chickens and ducks that were hatched the same day, in a flock together, and giving them all they will eat, the latter will outstrip the chickens in growth.

Dumplings (Apple).—1. First procure good, sour, juicy apples, pare and core, leaving them in halves. Get all your ingredients ready before beginning to mix your dough; sugar, soda, milk, lard, salt, flour and apples. Now make a dough as for soda biscuits, only adding a little more lard to make it shorter. Take a bit of dough on the kneading-board, and after kneading this, roll as for pie crust; then cut in pieces long enough to cover an apple, allowing for lapping the edges. Put in two of your apple halves, sweeten according to taste, and cover apple and sugar with dough. Lay the dumplings in your bread-pan, the smooth side up, first having your pan well buttered. Proceed in this manner until you get your pan well filled (be sure it is a large pan, for they will go off like hot cakes), then place a small bit of butter on top of each dumpling, sprinkling a handful of sugar over all; then place in a moderate oven and allow them to bake an hour. Serve with pudding sauce, or with cream and sugar.

2. Make a crust like that for soda biscuits. One quart flour, one pint milk (the crust must be soft as possible), half cup shortening, one teaspoonful soda, two teaspoonfuls cream tartar, or three teaspoonfuls of baking powder, a little salt. Roll and cut in circular shape, large enough for two halves of apple. We do not sweeten or flavor, nor do we bake, but put in the steamer and steam, and eat, when done, with sauce, or sugar and butter, or with syrup.

3. Peel and chop fine tart apples, make a crust of one cup of rich buttermilk, one teaspoonful of soda and flour enough to roll; roll half an inch thick, spread with the apple, sprinkle well with sugar and cinamon, cut in strips two inches wide, roll up like jelly-cake, set up the roll on end in a dripping-pan, putting a teaspoonful of butter on each; put in a moderate oven and baste often with the juice. Use the juice for the sauce, and flavor with brandy if you choose. A sauce of milk and butter sweetened and flavored, is mostly preferred.

Dust-pan—proper shape.—When you want a dust-pan, have it made to order, with the handle turned down instead of up, so as to rest on the floor, and tip the dust-pan at a proper angle for receiving the dust. It is a great convenience, as you do not have to stoop and hold it while you are sweeping.

Dyeing (Black).—Use four ounces of copperas and one ounce logwood extract to each pound of goods; dissolve the copperas in water sufficient to cover the cloth; wet it in clean water before putting it in the copperas water, to prevent spotting; boil it in the copperas water about twenty minutes; take it out, rinse in clean water first, then wash in soap-suds till it seems soft as before it was put in the copperas water; then put into the logwood dye and let it boil about twenty minutes; take out and let it dry; wash before it dries, or after, as is most convenient. It will neither crack, fade, nor grow rusty.

Dyes—for ivory, horn and bone.—BLACK.—Lay the articles for several hours in a strong solution of nitrate of silver, and expose to the light; boil the article for some time in a strained decoction of logwood, and then steep in a solution of per-sulphate or acetate of iron; immerse frequently in ink until of sufficient depth of color.

BLUE.—Immerse in a dilute solution of sulphate of indigo, partly saturated with potash, and it will be fully stained; steep in a strong solution of sulphate of copper.

GREEN.—Dip blue-stained articles for a short time in a nitro-hydrochlorate of tin, and then in a hot decoction of fustic; boil in a solution of verdigris in vinegar until the desired color is obtained.

RED.—Dip the article first in a tin mordant used in dyeing, and then plunge in a hot decoction of Brazil wood, one-half pound to a gallon of water or cochineal; steep in red ink till sufficiently stained.

SCARLET.—Use lack dye instead of the preceding.

VIOLET.—Dip in the tin mordant, and then immerse in a decoction of logwood.

YELLOW.—Boil the articles in a solution of alum, one pound to half a gallon, then immerse for half an hour in the following mixture: Take half a pound of turmeric, and a quarter of a pound of pearlash; boil in one gallon of water; when taken from this, the bone must be again dipped in the alum solution.

Dynamic Power of Various Kinds of Food.—One pound of oatmeal will furnish as much power as two pounds of bread, and more than three pounds of lean veal. One pound of butter gives a working force equal to that of nine pounds of potatoes, twelve pounds of milk, and more than five pounds of lean beaf. One pound of lump sugar is equal in force to two pounds of ham, or eight pounds of cabbage. The habitual use of spirituous liquors is inimical to health, and inevitably tends to shorten life. A mechanic or laboring man of average size requires, according to Moleschott, twenty-three ounces of dry solid matter daily, one-fifth nitrogenous. Food, as usually prepared, contains fifty per cent. of water, which would increase the quantity to forty-six ounces, or three pounds and fourteen ounces,

with at least an equal weight of water in addition daily. The same authority indicates as healthy proportions, of albuminous matter, 4.587 ounces; fatty matter, 2.964; carbo-hydrate, 14.250; salts, 1.058; total, 22.859 ounces, for daily use. This quantity of food will vary greatly in the requirements of individuals engaged in sedentary employments, or of persons with weak constitutions or impaired digestion, as also whether employed in the open air or within doors; much, also, depending on the temperature. Preference should be given to the food which most readily yields the materials required by nature in the formation of the human frame. Beef contains about four pounds of such minerals in every one hundred pounds. Dried extract of beef contains twenty-one pounds in each one hundred pounds. Bread made from unbolted wheat flour is also very rich in such elements, much more so than superfine flour; hence the common use of graham bread for dyspepsia and other ailments. The analysis of Liebig, Johnston, and others, give, in one hundred parts, the following proportions of nutritious elements, viz.: Indian corn, 12.30; barley, 14.00; wheat, 14.06; oats, 19.91. A fish diet is well adapted to sustain intellectual or brain labor. What is required may be best known from the fact that a human body weighing one hundred and fifty-four pounds contains, on a rough estimate, of water, fourteen gallons; (consisting of oxygen, one hundred and eleven pounds; of hydrogen, fourteen pounds;) carbon, twenty-one pounds; nitrogen, three pounds and eight ounces; calcicum, two pounds; sodium, two and a quarter ounces; phosphorus, one and three-quarter pounds; potassium, one-half ounce; sulphur, two ounces and two hundred and nineteen grains; fluorine, two ounces; chlorine, two ounces and forty-seven grains; iron, one hundred grains; magnesium, twelve grains; silicon, two grains. After death, the human body is, by gradual decay, slowly resolved into these its component parts, which elements are again used in the complex and wonderful laboratory of nature, to vivify the countless forms of vegetable life. These in their turn fulfil their appointed law by yielding up their substance for the formation of other bodies.

Dysentery (Cholera) Cordial.—Two ounces tincture cayenne, one ounce spirits camphor, one ounce tincture rhubarb, two ounces essence peppermint, two ounces best brandy, two drams laudanum. Dose for an adult, one teaspoonful every hour until relief is obtained.

Dysentery Remedy.—The egg is considered one of the best of remedies for dysentery. Beaten up slightly, with or without sugar, and swallowed at a gulp, it tends, by its emollient qualities, to lessen the inflammation of the stomach and intestine, and, by forming a transient coating on these organs, to enable nature to resume her healthful sway over a diseased body. Two, or at most three eggs per day would be all that is required in ordinary cases; and since egg is not merely medicine, but food as well, the lighter the diet other-

wise and the quieter the patient is kept, the more certain and rapid is the recovery.

Dyspepsia Remedy.—A sufferer from dyspepsia says: "The kernel of the peach pit has proved in many cases a perfect remedy for what is termed heartburn. I suffered from it hourly for years; more at some times than others. Seeing this remedy recommended in some journal, two or three years ago, I often since proposed to try it, but did not until last winter. When the suffering manifests itself, eat one or two of the kernels, and after a few days the symptoms will disappear. The remedy is simple, cheap, and harmless, and, best of all, effectual."

Dyspepsia—treatment of.—One of the first things to be attended to is to regulate the bowels, which in this disease are always in a costive state. The best means of keeping them loose is the eating of a handful of clean wheat bran, once or twice a day. This is the most simple and efficacious method of cleansing the stomach. It may be eaten from the hand with a few swallows of water to wash it down, also use, to regulate the stomach and bowels, the daily use of common salt, in teaspoonful doses, dissolved in a half tumblerful of water, taken in the morning fasting. Avoid rich diet, and use brown bread instead of that made of superfine flour.

Dyspeptics—diet for.—Dr. Milner Fothergil recommends the use of stewed fruits in many instances of gout and dyspepsia. Sugar is undoubtedly objectionable to many, but it is by no mean necessary to add sugar to stewed fruit; if the acidity be neutralized by an alkali, little or no sugar is required. Thrifty housewives have long been familiar with the fact that the addition of a small quantity of the bicarbonate of soda to stewed fruit reduces the acidity, so as to save the necessity of so much sugar. If about as much bicarbonate of potash as will lie on a shilling be added to each pound of fruit it will be found sufficient to neutralize the acidity and to bring out the natural sweetness. Milk puddings and stewed fruit are excellent for the dyspeptic, the bilious and the gouty.

Dyspepsia—cures and treatment.—The late Dr. Leared, in his recently published essay on "The Causes and Treatment of Indigestion," lays down as a fundmental principle that the amount of food which each man is capable of digesting with ease always has a limit which bears relation to his age, constitution, health and habits, and that indigestion is a consequence of exceeding this limit. Different kinds of food are also differently adapted to different constitutions. Dyspepsia may be brought on by eating irregularly, by allowing too long an interval between meals, and by eating too often. Frequently the meals are not gauged as to their relative amount, or distributed with a due regard for health. Thus, when we go out after taking a light breakfast and keep at our work, with a still lighter lunch only during the interval, till evening, we are apt, with the solid meal which tempts us to indulgence, to put the stomach to a harder test than it can bear. "When a light breakfast is eaten, a solid meal is requisite

in the middle of the day. When the organs are left too long unemployed they secrete an excess of mucus which greatly interferes with digestion. One meal has a direct influence on the next; a poor breakfast leaves the stomach over-active for dinner. The point to bear in mind is, that not to eat a sufficiency at one meal makes you too hungry for the next; and that, when you are too hungry, you are apt to overload the stomach and give the gastric juices more to do than they have the power to perform. Persons who eat one meal too quickly on another must likewise expect the stomach finally to give notice that it is imposed upon. Other provocatives of dyspepsia are imperfect mastication, smoking and snuff-taking, which occasions a waste of saliva—although some people find that smoking assists digestion, if done in moderation—sitting in positions that cramp the stomach, and the pressure that is inflicted on the stomach by the tools of some trades, as of curriers, shoemakers, and weavers. The general symptoms of dyspepsia are well known. Some that deserve special remark are fancies that the limbs or hands are distorted, mental depression, extreme nervousness, hyprochrondria and other affections of the mind. The cure is to be sought in avoiding the food and habits by which dyspepsia are promoted, and using and practicing those which are found to agree best with the system of the subject. Regularity in the hours of meals cannot be too strongly insisted on. The stomach should not be disappointed when it expects to be replenished. If disappointed, even a diminished amount of food will be taken, without appetite, which causes the secretions to injure the stomach, or else impairs its muscular action."

Dyspepsia or Nervous Debility—to cure.—Change your diet and manner of living, drink neither tea or coffee, never drink at meal times, after meal, or during the meal, dissolve half a teaspoonful or more of cayenne pepper in half a glassful of milk and drink it, eat plain food; never taste pastry of any kind. If you are troubled with sleepless nights, do not try to promote sleep by taking stimulants or opiates, they do more harm than good, take a sponge bath just before retiring, and if you are unable to do it yourself, get some one to rub you well with a coarse towel; if you wake in the night and cannot get to sleep again, get up at once, not lie until you get nervous thinking about it; take a foot bath; rub your limbs well to get up a circulation; drink a glass of cold water. Do not expect to cure yourself in one weeks' time; have patience, and try one month. In bathing, use your hands to apply the water, it is much better than a sponge; soften the water with borax, it is more invigorating than salt water.

Dyspepsia—remedy for.—Powdered rhubarb, sixty grains; bicarbonate of soda, half an ounce; powdered ginger, sixty grains; oil of anise seed, twenty drops. Make up these ingredients into twelve powders. Take a powder morning and evening.

Earache—specific for.—Olive oil, one ounce; chloroform, one grain. Mix and shake well together, then pour twenty-five or thirty drops in the ear, and close it up with a piece of raw cotton to exclude

the air and retain the mixture. The remedy I can truly say is a specific in earache. It acts promptly and efficiently.

Earache—to cure.—Generally heat is the best remedy. Apply a warm poultice or warm oil to the ear. Rub the back of the ear with warm laudanum. In case of a fetid discharge, carefully syringe the ear with warm milk and water. In all cases keep the ear thoroughly cleansed. Relief is often given by rubbing the back of the ear with a little hartshorn and water.

Earache—remedies for.—1. Put some live coals in an iron pan, sprinkle with brown sugar, invert a funnel over it, and put the tube in the ear. The smoke gives almost instant relief.

2. Carbolic acid diluted with warm water and poured into the ear is a sovereign cure for earache.

3. Take equal parts of chloroform and laudanum, dip a piece of cotton into the mixture and introduce into the ear, and cover up and get to sleep as soon as possible.

4. Four drops of oil of amber, and two drams of oil of sweet almonds. Four drops of this mixture to be applied to the part affected.

5. For earache, dissolve asafetida in water; warm a few drops and drop in the ear, then cork the ear with wool.

6. Cotton wool wet with sweet oil and laudanum often relieves earache, it is said.

Ear-wax—deficiency of.—Deafness is sometimes the consequence of a morbidly dry state of the inner passages of the ear, the ear-wax being deficient and hard and dry. In such cases introduce a bit of cotton wool dipped in an equal mixture of oil of turpentine and oil of almonds, or in the liniment of carbonate of ammonia.

Earthenware—to prevent cracking.—Before using new earthenware, place in a boiler with cold water, and heat gradually till it boils; then let it remain till the water is cold. It will not be liable to crack if treated in this manner.

Easter Eggs—to dye.—In Paris, where more than a million of these eggs are sold during the season, the red ones, which are the favorites, are dyed by boiling (not violently, however), about five hundred at a time, packed in a basket, in a decoction of logwood, and then adding some alum to convert the violet color to red. Various aniline dyes are also used for a similar purpose.

Economical Hints.—Look carefully to your expenditures. No matter what comes in, if more goes out, you will always be poor. The art is not in making money, but in keeping it; little expenses, like mice in a barn, when they are many, make great waste. Hair by hair, heads get bald; straw by straw, the thatch goes off the cottage; and drop by drop the rain comes in the chamber. A barrel is soon empty if the tap leaks but a drop a minute. When you mean to save, begin with your mouth; many thieves pass down the red lane. The ale jug is a great waste. In all other things keep within compass. Never stretch your legs farther than the blanket will reach, or you will soon take cold. In clothes, choose suitable and lasting stuff

and not tawdry fineries. To be warm is the main thing; never mind looks. A fool may make money, but it needs a wise man to spend it. Remember, it is easier to build two chimneys than to keep one going. If you give all to back and board, there is nothing left for the savings bank. Fare hard and work hard when you are young, and you will have a chance to rest when you are old.

Eggs—several ways to keep.—1. Eggs may be kept for an indefinite time if packed when quite fresh in boxes with rock alum in shape like rock salt. Put in a thick layer of alum, then the eggs, small end down cover with alum around and over them, and keep in a cool, dry place.

2. Slake fresh lime with boiling water, when cold, thin with cold water to the thickness of cream. Pack the eggs small end down, in a barrel or in stone jars, then pour on the cold whitewash, covering the eggs. Care must be used in taking them out, as they are easily cracked. This has been used with success for forty years.

3. Three gallons of water, one pint fresh slaked lime, one-half pint salt. Use perfectly fresh eggs with sound shells. If more lime is put in it eats the shell; if more salt, it hardens the yolks. Put them in carefully, they will keep perfectly good for a year or more.

4. Hold perfectly fresh eggs in boiling water while counting six. A wire basket can be used for this purpose. Be sure to have water enough to entirely cover the eggs. Let them dry and cool, then pack in oats. Put a layer of oats on the bottom of the keg or barrel sufficient to support the eggs. Pack them closely, small end down, and proceed till the barrel is filled. Shake it gently to settle oats and eggs firmly. This method has given eggs, a year after packing, in as good a state of preservation as when first packed.

5. A layer of salt is placed in the bottom of a stone jar, and the eggs are laid in this, the small end down; the spaces are to be filled with salt, and the eggs well covered, then another layer is put in, and so on until the jar is filled. Place the jar in a dry place, and the eggs will keep a year. This is one of the oldest methods of preserving eggs, but it may be new to some housekeepers.

Eggs—to preserve.—Several ways of preserving eggs are practiced. The object is to prevent evaporation from the egg. Cutting off the air from the contents of the egg preserves them longer than with any other treatment. An egg which has laid in bran even for a few days will smell and taste musty. Packed in lime, eggs will be stained. Covered with a coat of spirit varnish, eggs have kept so perfectly that after the lapse of two years chickens are hatched from them.

Spirit varnish for preserving eggs is made by dissolving gum shellac in enough alcohol to make a thin varnish. Coat each egg with this and pack, little end down, so that they cannot move, in bran, sawdust or sand; the sand is best. Whatever is used for packing should be clean and dry. For preserving in lime, a pickle is made of the

best stone lime, fine, clean salt; and water enough to make a strong brine, usually sixty or sixty-five gallons of water, six or eight quarts of salt, and a bushel of lime are used. The lime should be slaked with a portion of the water, the salt and the remainder of the water is added. Stir at intervals, and when the pickle is cold and the sediment has settled, dip or draw the liquid off into the cask in which the eggs are to be preserved. When only a few eggs are to be pickled a stone jar will answer.

Eggs—to test.—A good egg will sink in a body of water; if stale, a body of air inside, the shell will frequently cause it to float. When boiled, a fresh egg will adhere to the shell, which will have a rough exterior; if stale, the outside will be smooth and glassy. Looking through a paper tube directed toward the light, an egg held to the end of the tube will appear translucent if fresh; but if stale it will be dark—almost opaque.

Eggs (creamed).—Boil six eggs twenty minutes. Make a pint of nice cream gravy (boiling cream thickened with flour and seasoned with salt, or milk and butter thickened, if cream cannot be had.) Put a layer of this cream gravy over six slices of toast, laid on a hot platter. Cut the whites of the eggs in thin slices and lay over this, and rub half of the yolks through a seive over the layer of whites. Add another layer of whites, and another of sifted yolks, and lastly the remainder of the cream gravy. Set in the oven for a few minutes and serve.

Eggs—to color.—Take some of the narrowest colored ribbon, and bind it closely and neatly round the eggs, covering all parts, and securing the ends, so that the ribbon does not get loose. This may be done with a needle and thread, or by tucking the ends well in. The same egg may be bound with pieces of different colored ribbon, so as to vary the appearance. Boil the eggs thus bound for ten minutes. When cold, remove the ribbons, and the coloring will be left on the shells. The eggs may now be varnished, which will add much to the beauty of their appearance.

Eggs—ways of cooking.—For an omelet, which is a favorite dish with many excellent cooks, use this rule: Beat the yolks of six eggs and the whites of three till they are very light; take one teacup of cream, if you can get it (milk will answer if you cannot); mix with it very smoothly one tablespoonful of flour, add salt and pepper as you please; heat your frying-pan and melt in it a large spoonful of butter; when hot pour the eggs and cream in, and set in a quick oven. When it is thick enough—which is a matter of taste—pour over it the whites of three eggs, which are beaten to a stiff froth. Let it brown slightly, and then slip it out in a hot dish; this must be done very carefully, so that the whites of the eggs will be on the top. This dish may be varied by beating the six eggs together, and then adding the cream, etc. A good rule as to quantity is to use one egg for a person. One of the best ways, if not the very best, to cook eggs is to pour boiling water into a basin, set it on the hearth of the stove, or on the tank, and put the eggs into it; let them remain in it for five minutes; the egg

will be cooked enough to be delicious, it will digest easily, and in this way the wonderful elements which go to make up the egg are best presented. When done, break and drop on slices of buttered toast, or put in egg-cups in which you have first put a little lump of butter.

Eggs (baked).—Put saucers in the oven for a few minutes to heat, then put into each one a small piece of butter, and cover the saucer with it. Break two eggs into each saucer, put into the oven a few minutes until the whites are set, and serve in the saucers. They are very nice.

Another way: Break eight eggs into a well buttered dish, put in pepper and salt, bits of butter and three tablespoonfuls of cream; set in oven and bake about twenty minutes; serve very hot.

Eggs—a la creme.—Hard boil twelve eggs, and slice them in thin rings. In the bottom of a deep baking dish spread bits of butter, then a layer of bread crumbs, and then a layer of boiled eggs. Cover with bits of butter, and sprinkle with pepper and salt. Continue thus to blend these ingredients until the dish is full or nearly so. Crumbs over which bits of butter are spread, must cover all of these bits of eggs, and over the whole mixture a pint of sweet cream or sweet milk must be poured, before it is baked in a moderately heated oven.

Eggs—time required to boil.—In three minutes an egg will boil soft, in four, the white part is completely cooked, in ten, it is fit for a salad. Try their freshness in cold water those that sink the soonest are the freshest.

Eggs—to beat.—To beat the whites of eggs quickly, put in a pinch of salt. The cooler the eggs the quicker they will froth. Salt cools and also freshens them.

Egg-nog—to make.—To make a quart take three eggs, nearly a pint of good fresh milk, sugar and spice to suit the taste. Put these in a pitcher, add hot water to make a quart, then stir, or change from one vessel to another until completely mixed, then add a wineglassful or more of the best whisky. Wine may be used instead of whisky. The eggs and sugar must be thoroughly beaten before being put with the hot water.

Eggs (for the nest).—Use only good sized eggs, with strong shells. Make in the small end a hole about an eighth of an inch across, and in the other end a half inch hole. By blowing through the smaller hole, the contents of the shell will be driven out. Plaster of Paris is mixed with water, thin enough to pour. The shells are to be filled with this, using a spoon to fill them if necessary. When the shells are full, they are set aside for twenty-four hours. Trim off any superfluous plaster with a knife. These eggs are in appearance exactly like real eggs, and being heavy, are not thrown out of the nest.

Egg-plant—ways to cook.—1. Slice the fruit crosswise, about half an inch thick, peel and stack up with a sprinkling of salt between the slices, put a plate with a weight, a flat-iron will answer, on top, or lay the slices in strong salt and water. The object in either case is to remove a slight bitterness. At the end of two hours dry the

slices on a cloth, and dip in a thin batter of egg and flour, and fry to a light brown. Instead of the butter, dip first in beaten egg and then in cracker powder. Serve hot.

2. Pare and boil until soft, then mash, and season with salt and pepper to taste; make into thin cakes, dip in the beaten egg and cracker dust, and fry in hot lard.

3. Slice the egg-plant at least half an inch thick, pare each piece carefully, and lay it in salt and water, putting a plate upon the topmost to keep it under the brine, and let them alone for an hour or more. Wipe each slice, dip in beaten egg, then in cracker-crumbs, and fry in hot lard until well done and nicely browned.

Eggs (Pickled).—Boil eggs hard, and then divest them of their shells. Put them in a jar, and pour on them scalding vinegar flavored with ginger, garlic, white pepper, and allspice. This pickle is capital with cold meat.

Eggs in Surprise.—Take six fresh eggs, boil quite hard; take off as much of the top as will make each stand upright; take out all the yolks, and leave them to cool; also some part of the white, so as not to break them; pound the yolks with some cooked chicken or rabbits —they do not require much. Mix salt, pepper, and a little mace with the yolk of one unboiled egg, then pound all together. Take the shells off the whites carefully, fill the eggs with the pounded meat, place them in a stew-pan with points upward, in some good stock. After boiling for a few minutes take them carefully out, pouring the hot gravy over them; serve hot. This is an inexpensive dish, and looks nice.

Eggs—substitute for.—It is not generally known that boiled carrots, when properly treated, form an excellent substitute for eggs in pudding. They must, for this purpose, be boiled and mashed and pressed through a coarse cloth or hair sieve strainer. The pulp is then introduced among the other ingredients of the pudding, to the total omission of eggs. A pudding made in this way is much lighter than where eggs are used, and is much more palatable. On the principle of economy, this fact is worthy of the prudent housewife's attention.

Eggs (Scrambled).—Many use only eggs with butter and salt for this dish—for four eggs, one tablespoonful of butter. Melt the butter and turn in the beaten eggs, and stir quickly one or two minutes over a hot fire. A common practice is to increase the quantity without impairing the quality by adding milk—a small cupful to six eggs, and a tablespoonful of butter with salt and pepper as preferred. Stir these ingredients over a hot fire, putting in the butter first, until the whole thickens. It should be soft and creamy when done. It is very fine served on toast.

Eggs—how to increase production.—In the winter and early spring, to keep up egg production; the fowls must have something to work on. The best way to supply them, if there is not enough of waste meat scraps from the breeder's table to meet the required de-

mand, is to get scraps from the butcher or slaughter house. The waste meat, offal, and the bloody pieces which are unsalable can be bought for a cent or two a pound. The best way to utilize these scraps and to render them more digestible and nutritious is to cut them into fine pieces, put them into a boiler with plenty of water and boil them until the bones separate from the flesh. Then stir corn-meal into it until it makes a thick mush, season with salt and pepper, and cook till done. Feed this when cold to the poultry and they will eat it with evident relish, and you have a most excellent food which will keep during cold weather.

Eggs in Winter.—If hens have been carefully fed during the moulting season their owner may fairly expect a crop of eggs when the price is highest, usually about or little after the holidays. One of the most stimulating foods is bran liberally dosed with pepper and mixed with skim-milk. In cold weather corn or other grain should be added. The best method is to mix with their food, every other day, about a teaspoonful of ground Cayenne pepper to each dozen fowls. While upon this subject, it would be well to say, that if your hens lay soft eggs, or eggs without shells, you should put plenty of old plaster, egg-shells, or even oyster-shells broken up, where they can get at it.

Electro-plating—gold solution for.—Dissolve five pennyweights gold coin, five grains pure copper, and four grains pure silver in three ounces nitro-muriatic acid, which is simply two parts muriatic acid and one part nitric acid. The silver will not be taken into solution as are the other two metals, but will gather at the bottom of the vessel. Add one ounce pulverized sulphate of iron, one-half ounce pulverized borax, twenty-five grains pure table salt, and one quart hot rain-water. Upon this the gold and copper will be thrown to the bottom of the vessel with the silver. Let it stand till fully settled, then pour off the liquor very carefully, and refill with boiling rain-water as before. Continue to repeat this operation until the precipitate is thoroughly washed; or, in other words, fill up, let settle, and pour off so long as the accumulation at the bottom of the vessel is acid to the taste. You now have about an eighteen carat chloride of gold. Add to it an ounce and an eighth of cyanuret potassa, and one quart of rain-water—the latter heated to the boiling point. Shake up well, then let it stand about twenty-four hours, and it will be ready for use. Some use platina as an alloy instead of silver, under the impression that plating done with it is harder. I have used both, but never could see much difference. Solution for a dark colored plate to imitate Guinea gold may be made by adding to the above one ounce dragon's blood and five grains iodide of iron. If you desire an alloyed plate, proceed as first directed, without the silver or copper, and with an ounce and a half of sulphuret potassa in place of the iron, borax, and salt.

Embalming—new method of.—Mix together five pounds dry sulphate of alumine, one quart of warm water, and one hundred grains

of arsenious acid. Inject three or four quarts of this mixture into all the vessels of the human body. This applies as well to all animals, birds, fishes, etc. This process supercedes the old and revolting mode, and has been introduced into the great anatomical schools of Paris.

Emetic (Prompt-acting).—The ingredients are: Tartar emetic, one grain; powdered ipecac, twenty grains. Take the above in a wineglassful of sweetened water.

Engravings—to clean.—It frequently happens that fine engravings, despite the care taken of them, will in some unaccountable manner become stained and dirty to such an extent as to seriously impair their beauty. To those who own engravings that have been injured in this way, a simple recipe for cleaning them will prove of value. Put the engraving on a smooth board and cover it with a thin layer of common salt, finely pulverized; then squeeze lemon-juice upon the salt until a considerable portion of it is dissolved. After every part of the picture has been subjected to this treatment, elevate one end of the board, so that it will form an angle of about forty-five degrees with the horizon. From a teakettle or other suitable vessel pour on the engraving boiling water, until the salt and lemon-juice be all washed off. The engraving will then be perfectly clean and free from stain. It must be dried on the board, or on some smooth surface, gradually. If dried by the fire or sun, it will be tinged with a dingy, yellowish color.

Engravings—to mount.—Look up all your engravings and nice wood cuts, and trim them off evenly. At the stationer's you can get a cheap kind of Bristol board. Cut it up into two sizes, one large, and the other smaller. Make a smooth paste of starch, cover the back of the picture with it, taking care that the edges are all wet, but do not put on enough so that it will squeeze out. Place it on the Bristol board, taking care to get it in the middle. Have a sheet folded, and lay the picture, face downward, on it. Lay a soft, thin cloth over it and press it a few minutes with a hot iron, then turn it over, and spread on the cloth as before, and press till dry.

Epilepsy—treatment of.—Prof. W. H. Gobrecht employed in the treatment of this disease the following: Sodie bromide, two ounces; zinc bromide, thirty-two grains; glycerine, one ounce; aqua cinnamonia, seven ounces. Dose, tablespoonful three times a day in a half wineglassful of water. This is an excellent prescription, not only useful in epilepsy, but in many diseases of the nervous system, especially when persons are sleepless and restless at night. One or two doses of this medicine will quiet the most excited lunatic.

Epizootic—remedy for.—One of the simplest remedies for the epizootic, it is said, is a mixture of tar and asafetida, ten drops of which are given twice a day in the feed. Beside this a warm bran mash once a day is recommended.

Erupsions, Pimples, etc.—cure for.—Having in numberless instances seen the good effects of the following prescription, I can cer-

tify to its perfect remedy: Dilute corrosive sublimate with the oil of almonds; apply it to the face occasionally, and in a few days a cure will be effected.

Erysipelas—treatment of.—Erysipelas is a peculiar, unpleasant, and frequently a fatal disease, particularly so when it reaches the brain. There is no doubt but that erysipelas is infectious and inoculable; its power of infection, however, is not very great, and can easily be prevented by careful observance of hygienic laws. The most common form of the disease is the simple cutaneous, and this is the kind upon which we shall endeavor to enlighten our readers. It effects all ages and both sexes, but more frequently females. It appears as a peculiar spreading but circumscribed redness of the skin with inflammation and somewhat elevated condition, and is always attended with fever. The symptoms of the disease are aching and soreness of the limbs; chills, alternating with flushes, sickness at the stomach, vomiting, restlessness, weakness, appearance of eruption on second or third day or earlier, and the disease is most dangerous in face and scalp.

The treatment should be quite generally tonic, the food light, but nutritious, beef-tea, eggs, milk, cream, etc., and some stimulants may be advantageously used. Internally, give the patient thirty drops tincture of perchloride of iron every four hours; or, what is better still, give the following:

Iron and citrate quinine, forty grains; strichnine, one-eighth of a grain, made into twenty pills. Give one pill every six hours; then paint the surface over carefully five or six times a day with collodion, one dram; castor oil two ounces, Use with camel's-hair brush. After the inflammatory symptoms have subsided, the patient can have a a little brandy two or three times a day, and good, generous diet.

Erysipelas—cure.—One pint of sweet milk and a handful of pokeberry roots. This is a sure cure.

Essences—to make.—Essences are made with one ounce of any given oil, added to one pint alcohol. Peppermints are colored with tincture turmeric; cinnamon with tincture of red sanders; wintergreen with tincture kino.

Essence—from flowers.—Procure a quantity of the petals of any flowers which have an agreeable fragrance; card thin layers of cotton, which dip into the finest Florence or Lucca oil; sprinkle a small quantity of fine salt on the flowers alternately until an earthen vessel or wide-mouthed glass bottle is full. Tie the top close with a bladder, then lay the vessel in a south aspect to the heat of the sun, and in fifteen days, when uncovered, a fragrant oil may be squeezed away, leaving a whole mass quite equal to the high-priced essences.

Essence from Flowers—how to extract.—Take any flowers you choose; place a layer in a clean earthen pot, and over them a layer of fine salt. Repeat the process until the pot is filled; cover closely, and place in the cellar. Forty days afterwards, strain the essence from the whole through a crape by pressure. Put the essence thus express-

ed in a clear bottle, and expose it for six weeks in the rays of the sun and evening dew, to purify. One drop of this essence will communicate its odor to a pint of water.

Essence of Roses.—Take four parts of clean fresh leaves of rose flowers—damask roses are best—put them into a still with twelve parts of water. Distil off one-half; repeat the process, and when a sufficient quantity of this liquid has been obtained, it must be used as water upon fresh rose-leaves, and the same process must be continued four or five times until the quantity desired is obtained. If carefully done, this essence will be very powerful.

Essential Oil from Wood, Barks, Roots, Herbs, etc.—Take balm, mint, sage or any other herb, etc., put it into a bottle, and pour upon it a spoonful of ether; keep in a cool place a few hours, and then fill the bottle with cold water; the essential oil will swim upon the surface and may be easily separated.

Etching on Glass.—Druggists' bottles, bar-tumblers, signs, and glassware of ever description, can be lettered in a beautiful style of art, by simply giving the article to be engraved, or etched, a thin coat of engraver's varnish and the application of fluoric acid. Before doing so, the glass must be thoroughly cleaned and heated, so that it can hardly be held. The varnish is then to be applied lightly over, and made smooth by dabbing it with a small ball of silk, filled with cotton. When dry and even, the lines may be traced on it by a sharp steel, cutting clear through the varnish to the glass. The varnish must be removed clean from each letter, otherwise it will be an imperfect job. When all is ready, pour on or apply the fluoric acid with a feather, filling each letter. Let it remain until it etches to the required depth, then wash off with water, and remove the varnish.

Etching Varnish.—Take of virgin wax and asphaltum, each two ounces; of black pitch and Burgundy, each one-half ounce; melt the wax and pitch in a new earthenware glazed pot, and add to them, by degrees, the asphaltum, finely powdered. Let the whole boil, simmering gradually, till such time as, taking a drop upon a plate, it will break when it is cold, or bending it double two or three times between the fingers. The varnish, being then boiled enough, must be taken off the fire, and, after it cools a little, must be poured into warm water that it may work the more easily with the hands, so as to be formed into balls, which must be kneaded, and put into a piece of taffety for use. The sand blast is now in extensive use for ornamenting on glass.

Eyes (Bad)—to cure.—Dissolve two cents' worth of refined white copperas in a pint of spring water and put it into a bottle. Wash the eyes in warm water and bathe them with the above lotion. Be careful that none of the lotion gets into the mouth, as it is poison.

Eye—how to remove a mote from.—To remove a mote from the eye, take a horsehair and double it, leaving a loop. If the mote can be seen, lay the loop over it, close the eye, and the mote will come out as the hair is withdrawn. If the irritating object cannot be seen,

raise the lid of the eye and roll the ball around a few times; draw out the hair; the substance which caused so much pain will be sure to come with it. This method is practiced by ax-makers and other workers in steel.

Eyes (Inflamed)—treatment of.—Borax, half a dram; camphor water, three ounces. The above simple prescription is in common use by the highest medical authorities. It makes a wash unexcelled for the treatment of inflammation of the eyes. In using it lean the head back and drop three drops in the corner of each, and then open the eyes and let it work in. Use it as often as the eyes feel badly.

Eye Lotion.—Acetate of zinc, one-half dram; distilled water, sixteen ounces. Mix, and apply the lotion to the eyes with a piece of soft rag.

Eye Lotion—useful in cases of sore eyes.—Three tablespoonfuls of cold spring water, four drops of Goulard extract, two drops of laudanum, fifteen drops of brandy. Mix these in a bottle, and bathe the eyes with a piece of soft sponge saturated with the mixture.

Eyelids (Inflammation of).—The following ointment has been found very beneficial in inflammation of the eyeball and edges of the eyelids: Take of prepared calomel, one scruple; spermaceti ointment, one-half ounce; mix them well together in a glass mortar; apply a small quantity to each corner of the eye every night and morning, and also to the edges of the lids if they are affected. If this should not eventually remove the inflammation, elder-flower water may be applied three or four times a day, by means of an eye-cup. The bowels should be kept in a laxative state, by taking occasionally one-quarter ounce of Epsom salts.

Eyesight—to prolong the use of.—Sooner or later our eyesight must become impaired. When beginning to use glasses, use them as short a time as possible, only in deficient light, or on minute objects. By a judicious attention to these two points, the ageing of the sight will be retarded years. And as reading is one of the luxuries of the age, and one of its most delightful pastimes, we cannot be too careful of the eyesight, and should study how to husband its powers.

Eyesight—to strengthen.—Let there be an occasional pressure of the finger on the ball of the eye. Let the pressure always be from the nose and toward the temples, and wash the eyes three times a day in cold water. If this simple advice is followed the day is not far distant when partial blindness shall disappear from the world.

Eyes (Sore)—prescription for.—Sulphate of zinc, three grains; tincture of opium (laudanum), one dram; rose water, two ounces; mix. Put a drop or two in the eye two or three times daily.

2. Sulphate of zinc, acetate of lead, and rock salt, of each one-half ounce; loaf sugar, one ounce; soft water, twelve ounces; mix without heat, and use as other eye waters. If sore eyes shed much water, put a little of the oxide of zinc into a phial of water, and use it rather freely. This will soon effect a cure. Copperas and water has cured sore eyes of long standing; and used quite strong, it makes an excel-

lent application in erysipelas. Alum and the white of an egg is good.

Eyes (Sore)—wash for.—Dissolve sixteen grains of acetate of zinc in half a pint of soft water (rose water is best), and apply it to the eyes several times a day.

Eye Water for Horses and Cattle.—Alcohol, one tablespoonful, extract of lead, one teaspoonful; rain water, one-half pint.

Eyes—to cure weakness.—Sulphate of copper, fifteen grains; camphor, four grains; boiling water, four ounces; mix, strain, and when cold, make up to four pints with water; bathe the eye night and morning with a portion of the mixture.

Eyes (Weak)—remedies for.—1. When the eyes are weakened or distressed by over exertion, few remedies will be found more effectual than bathing them every morning with clean spring water, in which has been placed just sufficient brandy to make the mixture cause a slight stinging sensation when applied to the eyes. This weak brandy-and-water lotion may be kept ready mixed in a bottle. Another useful eye water is made by mixing forty drops of laudanum with two tablespoonfuls of milk, and the same quantity of water.

2. There is no better recipe for curing weak eyes, it is said, than cold water. Sluice plentifully, not only the eyes, but the ears, especially the orifice.

Facts Worth Knowing.—That salt fish are quickest and best freshened by soaking in sour milk.

That cold rain water and soap will remove machine grease from washable fabrics.

That fish may be scalded much easier by first dipping them into boiling water for a minute.

That fresh meat, beginning to sour, will sweeten if placed out of doors in the cool air over night.

That milk which has changed may be sweetened or rendered fit for use again by stirring in a little soda.

That boiling starch is much improved by the addition of sperm or salt, or both, or a little gum arabic, dissolved.

That a tablespoonful of turpentine, boiled with your white clothes, will greatly aid the whitening process.

That kerosene will soften boots and shoes that have been hardened by water, and will render them pliable as new.

That clear boiling water will remove tea stains. Pour the water through the stain, and thus prevent its spreading over the fabric.

That salt will curdle new milk, hence in preparing milk porridge, gravies, etc., the salt should not be added until the dish is prepared.

That kerosene will make your tea-kettle as bright as new. Saturate a woolen rag and rub with it. It will also remove stains from the clean varnished furniture.

That blue ointment and kerosene, mixed in equal proportions and applied to beadsteads, is an unfailing bug remedy, and that a coat of whitewash is ditto for a log house.

That beeswax and salt will make your rusty flat-irons as clean and as smooth as glass. Tie a lump of wax in a rag and keep it for that purpose. When the irons are hot rub them first with the wax rag, then scour them with a paper or cloth sprinkled with salt.

Facades (Stone)—to clean.—It has been ascertained that the jet of water thrown from a steam fire-engine has the power of removing the discoloration produced by the smoke, without injuring the face of the stone. The work is done from the ground, the force of the stream thrown by the steam fire-engine being quite sufficient to effect the necessary cleansing.

Farm Implements—to prevent decay of.—When not in use have them sheltered from the sun, wind, rain, and snow. By this means sleighs, wagons, carts, ploughs, threshing-machines, harrows, and the like, would last twice as long as they would if left in the open air, swelling from moisture one week, and shrinking the next from the influence of the sun and wind.

Feathers—to wash and curl.—Wash in warm soap-suds and rinse in water a very little blued, if the feather is white, then let the wind dry it. When the curl has come out by washing the feather or getting it damp, place a hot flat-iron so that you can hold the feather just above it while curling. Take a bone or silver knife and draw the fibers of the feather between the thumb and the dull edge of the knife, taking not more than three fibers at a time, beginning at the point of the feather and curling one-half the other way. The hot iron makes the curl more durable. After a little practice, one can make them look as well as new feathers. When swans down becomes soiled it can be washed and look as well as new. Tack strips on a piece of muslin and wash in warm water with white soap, then rinse and hang in the wind to dry. Rip from the muslin and rub carefully between the fingers to soften the leather.

Feathers—to dye different colors.—BLACK.—Immerse for two or three days in a bath, at first hot, of logwood, eight parts, and copperas or acetate of iron, one part.

BLUE.—With the indigo vat.

BROWN.—By using any of the brown dyes for silk or woolen.

CRIMSON.—A mordant of alum, followed by a hot bath of Brazil wood, afterwards by a weak dye of cudbear.

PINK OR ROSE.—With saf-flower, or lemon juice.

PLUM.—With the red dye, followed by an alkaline bath.

RED.—A mordant of alum, followed by a bath of Brazil-wood.

YELLOW.—A mordant of alum, followed by a bath of turmeric or weld.

GREEN.—Take of verdigris and verditer, of each one ounce; gum water, one pint; mix them well and dip the feathers (they having been first soaked in hot water) into the said mixture.

PURPLE.—Use lake and indigo.

CARNATION.—Vermilion and smalt. Thin gum or starch water should be used in dying feathers.

Febrifuge Wine.—Quinine, twenty-five grains; water, one pint; sulphuric acid, fifteen drops; epsom salts, two ounces; color with tincture of red sanders. Dose: A wine glass three times per day. This is a world-renowned medicine.

Feetache—panacea for.—When your work is finished sit down with your feet in as hot water as can be borne, adding water if convenient for as long a time as possible. Three or four times will effect a cure, and you will not be troubled again in a good while.

Feet (Cold)—cure for.—Use a foot-bath each night of cold water, with two pounds of fuller's earth dissolved in water.

Feet (Blistered)—remedy for.—A good remedy for feet blistered from long walking: Rub the feet, at going to bed, with spirits mixed with tallow dropped from a lighted candle into the palm of the hand.

Felons, Boils—simple remedy for.—Felons, which are usually termed "Whitlow" by physicians, are a very painful and often a very serious affection of the fingers, generally of the last joints, and often near or involving the nails. As the fingers are much exposed to bruises, felons are quite common among those who constantly use their hands at hard work. If allowed to continue until matter (pus) forms, and the periosteum or bone sheathing is affected, lancing is necessary; but if taken in time, a simple application of copal varnish, covering it with a bandage, is highly recommended. If the varnish becomes dry and unpleasantly hard, a little fresh varnish may be applied from time to time. When a cure is effected, the varnish is easily removed by rubbing into it a little lard and washing with soap and water. Dr. A. B. Isham suggests the use of copal varnish for felons, "run-arounds," boils, and any local acute inflammation of external parts.

Felon—cure for.—The London *Lancet* gives the following cure for bone-felon: "As soon as the disease is felt, put directly over the spot a fly-blister about the size of your thumb nail, and let it remain for six hours, at the expiration of which time, directly under the surface of the blister may be seen the felon, which can be instantly taken out with the point of a needle or a lancet."

Felons—remedies for.—1. Take a skunk lily root, grate it with a coarse grater, moisten with water, change twice a day. Skunk lily, or toad lily, as some call it, grows in wet land and has a yellow flower with black spots on the leaves.

2. The pith from the backbone of a calf. Change twice a day.

3. Keep the sore wet with tincture of lobelia. Either of the above remedies will cure a felon.

4. If lobelia can not be conveniently obtained, rock salt pulverized, after being dried in an oven and mixed with an equal part of turpentine and applied frequently, will destroy a felon in twenty-four hours.

Felons—if recent, to cure in six hours.—Venice turpentine, one ounce; and put into it half a teaspoonful of water, and stir with a rough stick until the mass looks like candied honey; then spread a

good coat on a cloth, and wrap around the finger. If the case is only recent, it will remove the pain in six hours.

Felon Salve.—A salve made by burning one teaspoonful of copperas, then pulverizing it and mixing it with the yolk of an egg, is said to relieve the pain, and cure the felon in twenty-four hours; then heal with cream two parts, and soft soap one part. Apply the healing salve daily after soaking the part in warm water.

Felon Ointment.—Take sweet oil, one-half pint, and stew a three-cent plug of tobacco in it until the tobacco is crisped; then squeeze it out, and add red lead, one ounce, and boil until black; when a little cool, add pulverized camphor gum, one ounce.

Fence Posts—to make durable.—I discovered many years ago that wood could be made to last longer than iron in the ground, but thought the process so simple and inexpensive that it was not worth while te make any stir about it. I would as soon have poplar, basswood, or quaking ash as any other kind of timber for fence posts. I have taken out basswood posts after having been set seven years, which were as sound when taken out as when they were first put in the ground. Time and weather seemed to have no effect on them. The posts can be prepared for less than two cents a piece. This is the recipe: Take boiled linseed oil and stir it in pulverized charcoal to the consistency of paint: Put a coat of this over the timber, and there is not a man that will live to see it rotten.

Ferns—varieties and treatment.—I should like to say to the person who wishes to know what ferns can be grown in the house, that I have had for three winters, in a furnace heated parlor, very handsome plants of Aspidium molle and Adiantum cuneatum; and I have a friend who has Pteris tremula, looking as well as it could in a greenhouse. I also know that Pteris hastata does well in the house; so does the Japanese climbing fern and Lygodium scandons. All require to be kept comfortably warm, not too wet, and seldom sprinkled —just often enough to keep them clean. I have found that wetting the foliage often causes it to turn black.

Ferns—to preserve—I frequently see directions for bleaching ferns, but in the fall of the year we have no difficulty in finding them pretty enough without that trouble. Besides the white, there are straw color, pea green, and many beautiful shades of brown. Soon after gathering, iron them with a not too hot iron, which has been waxed with common yellow beeswax. If intended to frame or wanted to be perfectly flat, iron until dry. Frame with black velveteen or cloth for a background, either with or without a mat. For bouquets for vases or similar decorations, I think they are nicer not to be ironed perfectly dry; they will then be curled and drooping a little, much more graceful and natural; autumn leaves can be treated in the same way and remain on the branches if desired.

Fern-case—to make.—This fern-case consists of three bars crossed at the top and fastened into a triangular base. A basket is suspended from the center of the case, and the base is decorated with shells,

acorns, or corals. The best method of making this case is to have the base first made of wood, then lined with zinc. The sides should hold glass neatly filled into the bars, thus inclosing the plants from the outer air. The height should be about three feet, and width of base two feet on each side. Any florist can supply ferns for such a structure. Choose only the smaller growing sorts, and avoid those which branch widely.

Ferns—ornamental uses of.—Bleached skeleton ferns may be laid on photograph book covers, wooden trays, and blotting books, and varnished. They look specially well on black painted wood, when, if laid close together, they resemble an inlaying of ivory. A plain table with one drawer, makes quite a pretty writing table by staining it black, and then laying the ferns on a border around the top, and around the drawer. The ferns can also be applied to velvet frames, when the whole should be covered with white tulle of the finest and most invisible description. A blue velvet-covered board for placing in a fireplace during the summer, may have a center bouquet of skeleton ferns, lightly covered with tulle, and a border of lace quite at the edge.

Fern Work.—The handsome articles that come under this head are made simply by pinning ferns or leaves, in any form desired, upon white cloth, and drawing a comb through a small brush of indelible ink, so that minute particles will be scattered over the cloth. Upon removing the ferns their impression, uncolored, is distinct. Doylies made in this way are charming. Paper hanging and other wall ornaments are made of white paper, and spotted with common ink. Gilt paper can be used with fine effect.

Fever—to cool.—For a fever patient, break ice into very small pieces and mix with the same quantity of lemon jelly, also cut up small. It is refreshing.

Fever—to relieve.—Where a child has a simple fever from teething or any other cause not connected with acute disease, give a teaspoonful of syrup of rhubarb, a warm injection, and sponge baths. These will generally be all that is needed.

Fever and Ague—cure for.—One-half ounce spirits nitre, one-half ounce tincture pepper, thirty-five grains quinine, one pint of brandy. Take a wineglassful three times a day, one-half hour before meals. If for a child, give only half the quantity.

Fever and Ague—cure.—A gentleman recently from Central America (a great place for the shakes) says that he has seen many obstinate cases cured by wearing finely pulverized rock salt between the feet and stockings. We cannot vouch for the value of this remedy, but consider it worthy of trial.

Fever Drink.—There is no more refreshing drink in cases of fever than weak green tea, with lemon juice added instead of milk. It may be taken either cold or hot, but the latter is preferable.

Fever (Scarlet)—treatment.—Keep all who have never had the disease away from the house. If possible, send other children away.

Do not kiss the patient, and keep others from doing so. Rubbing the body with vaseline, or oil, will allay the itching. The patient should be kept in bed until the skin has done peeling, and in his room for two weeks longer. Keep him away from other members of the family for a month from the beginning of the disease. Avoid exposure to cold, and carefully obey the physician's orders.

Fever (Scarlet)—treatment of.—An eminent physician says he cures ninety-nine out of every hundred cases of scarlet fever by giving the patient warm lemonade with gum arabic dissolved in it. A cloth wrung out in hot water and laid upon the stomach should be removed as rapidly as it becomes cool. In cases where physicians are not easily obtainable, simple remedies are not to be despised.

Fever (Scarlet).—Scarlet fever is an acute inflammation of the skin, both external and internal, and connected with an infectious fever.

Symptoms.—The fever shows itself between two and ten days after exposure. On the second day of the fever the eruption comes out in minute pimples, which are either clustered together, or spread over the surface in a general bright scarlet color. The disease begins with languor, pains in the head, back, and limbs, drowsiness, nausea and chills, followed by heat and thirst. When the redness appears, the pulse is quick, and the patient is restless, anxious and often delirious. The eyes are red, the face swollen, and the tongue covered in the middle with white mucus, through which are seen elevated points of extreme redness. The tonsils are swollen and the throat is red. By the evening of the third or fourth day the redness has reached its height, and the skin becomes moist, when the scarf-skin begins to come off in scales.

In this fever the flesh puffs up so as to distend the fingers, and disfigure the face. As it progresses, the coating suddenly comes off the tongue, leaving it and the whole mouth raw and tender. The throat is very much swollen and inflamed, and ulcers form on the tonsils. The eustachian tube which extends up to the ear, the glands under the ear and jaw, sometimes inflame and break; and the abscesses formed in the ear frequently occasion deafness, more or less difficult to cure. The symptoms of this disease may be known from that of measles by the absence of cough, by the finer rash, by its scarlet color, by the rash appearing on the second instead of the fourth day, and by the ulceration of the throat.

Treatment.—In ordinary cases the treatment required is very simple. The room where the patient lies should be kept cool, and the bed-covering light. The whole body should be sponged with cool water as often as it becomes hot and dry, and cooling drinks should be administered. A few drops of belladonna, night and morning, is all that is needed.

If there is much fever and soreness of throat, give the following tincture of hellebore often enough to keep down the pulse:

Tincture of American hellebore, one dram; tincture of black co-

hosh, two ounces; mix. Take one teaspoonful three to six times a day.

It would also be useful to commence treatment with an emetic, and to soak the feet and hands in hot water containing a little mustard or cayenne pepper, continuing this bath twenty minutes, twice a day, for two or three days. The cold stage being passed, and the fever having set in, warm water may be used without the mustard or pepper. If the head is affected, put drafts upon the feet; and if the bowels be costive, give a mild physic. Solid food should not be allowed; but when the fever sets in, cooling drinks, such as lemonade, tamarind water, rice water, flaxseed tea, then gruel, or cold water may be given in reasonable quantities. To stimulate the skin, muriatic acid, forty-five drops in a tumbler filled with water and sweetened, and given in doses of a teaspoonful, is a good remedy.

Where the disease is very violent, and the patient inclined to sink immediately; where typhoid symptoms appear and there is great prostration, the eruption strikes in, the skin changes to a mahogany color, the tongue is a deep red, or has on it a dark brown fur, and the ulcers in the throat become putrid, the treatment must be different from the above. In this case it must be tonic. Quinia must be given freely; and wine whey, mixed with toast water, will be useful. Quinia is made as follows: Sulphate of quinine, one scruple; alcohol, four ounces; sulphuric acid; five drops; Madeira wine, one quart; mix. Two wineglassfuls a day. Tincture of cayenne in sweetened water, may be given in small doses. Gargles are also necessary. A good one is made of pulverized cayenne, one dram; salt, one dram; boiling water, one gill; mix, and let them stand fifteen minutes. Then add one gill vinegar. Let it stand an hour and strain. Put a teaspoonful in the child's mouth once an hour. A warm bath should be used daily as soon as the skin begins to peel off, to prevent dropsy. If dropsy sets in, the bath once in three days is sufficient, and sweating should be promoted by giving the tincture of Virginia snake-root and similar articles; a generous diet should be allowed at the same time, to bring up the child's strength

Fever (Typhoid)—symptoms.—It is generally preceded by several days of languor, low spirits, and indisposition to exertion. There is also usually some pain in the back and head, loss of appetite, and drowsiness, though not rest. The disease shows itself by a chill. During the first week there is increased heat of the surface, frequent pulse, furred tongue, restlessness, sleeplessness, headache, and pain in the back; sometimes diarrhœa and swelling of the belly, and sometimes nausea and vomiting.

The second week is often distinguished by small, rose-colored spots on the belly, and a crop of little watery pimples on the neck and chest, having the appearance of minute drops of sweat; the tongue is dry and black, or red and sore, the teeth are foul, there may be delirium and dullness of hearing, and symptoms every way are more serious

than during the first week. Occasionally, the bowels at this period are perforated or eaten through by ulceration, and the patient suddenly sinks. If the disease proceeds unfavorably into the third week, there is low, muttering delirium, great exhaustion, sliding down of the patient toward the foot of the bed, twitching of the muscles, bleeding of the bowels, and red or purple spots upon the skin; if, on the other hand, the patient improves, the countenance brightens up, the pulse moderates, the tongue cleans, and the discharges look healthy.

Treatment.—Give the patient good air, and frequent sponging with water, cold or tepid, as most agreeable. Keep the bowels in order, and be more afraid of diarrhœa than costiveness. Diarrhœa should be restrained by a little brandy, or by repeated doses of Dover's powder. For costiveness, give mild injections, made slightly loosening by castor oil, or common molasses. To keep down the fever, and produce perspiration, give tincture of veratrum viride, ten drops every hour. If the bowels are swelled, relieve them by hot fomentations of hops and vinegar. If the pain in the head is very severe and constant, let the hair be cut short, and the head bathed frequently with cold water. Give light nourishment, and if the debility is great, broth and wine will be needed. Cleanse the mouth with very weak tea—old hyson. If the fever runs a low course, and the patient is very weak, quinine may be given from the beginning. Constant care and good nursing are very important.

Typhus fever is distinguished from typhoid by there being no marked disease of the bowels in typhus.

Fig Paste—how to make.—Take twelve pounds of wheat starch, and one hundred pounds of "A" sugar, or in that proportion; to that amount of sugar add half an ounce to one ounce of acetic acid, after the sugar is dissolved in sufficient water to thoroughly dissolve it; add to the starch enough water to thoroughly wet it up, and add it to the dissolved sugar; boil over coal fire in a copper kettle till done, then turn out in pans or moulds greased with beef suet. Stir constantly from the time the starch is put in till it is taken off the fire, or it will burn. Use a sharp-edged wood paddle to stir with. It must be thoroughly cooked, or it will soon become dry and hard. When cooked enough it remains soft, flexible and tough for months. Lemon or other flavoring may be stirred in just after it is taken off of the fire.

The above might be reduced down to the following proportions, and the "fig paste" made in a preserving kettle: Half pound of starch, four pounds of "A" sugar, one teaspoonful of acetic acid or vinegar. Flavor with a few drops of essence of vanilla.

Founder—cured in twenty-four hours.—Boil or steam stout oat-straw for half an hour, then wrap it around the horse's leg quite hot; cover up with wet woolen rags to keep in the steam; in six hours renew the application, take one gallon of blood from the neck vein, and give one quart linseed oil. He may be worked the next day.

Fruit (Bottled).—Bottled fruit bought at stores is so generally

adulterated with copper, which is a deadly poison, and which is made use of to give a bright green appearance to the fruit, that we would strongly advise all careful housekeepers to bottle fruit for themselves. The following is Mr. Saddington's recipe: "The fruit is to be gathered before it is too ripe, the bottles are to be well filled with it, and closely corked; they are next to be placed in a vessel containing cold water, which should reach as high as the necks of the bottles; heat is then to be applied, and the temperature raised from one hundred and sixty to one hundred and seventy degrees, and maintained at this for half an hour; lastly, the bottles are to be filled to within an inch of the corks with boiling water; they are to be well corked immediately, and laid upon their sides, so that the water may swell the corks, whereby the entrance of the air will be effectually prevented.

Fruit Trees—how to protect from mice.—Take tar, one part; tallow, three parts; mix. Apply hot to the bark of the tree with a paint brush.

Files and Rasps—to re-cut.—The worn files are first cleaned with potash and hot water, after which they are left for five minutes in a solution composed of one part of sulphuric acid and seven parts of water; a quantity of nitric acid equal to the sulphuric is then added to the solution, and as much water also, and the files are left in the solution for about forty minutes longer. They are now ready for use, but, if to be stored, they must be brushed over with a little oil or grease to prevent rusting. The files are not allowed to touch each other in the solution, being supported by their tangs only. In order to obtain the most complete results possible, the proportions of acid are varied according to the size of the files; for example, for large files, one-sixth acid; for bastard files, one-eighth, one-ninth, to one-eleventh; and for the finest, one-twelfth to one-thirteenth.

Files—to re-sharpen.—Remove the grease and dirt from your files by washing them in warm potash water, then wash them in warm water, and dry with artificial heat; next, place one pint warm water in a wooden vessel, and put in your files, add two ounces of blue vitirol, finely pulverized, two ounces borax, well mixed, taking care to turn the files over, so that each one may come in contact with the mixture. Now add seven ounces sulphuric acid and one-quarter ounce cider vinegar to the above mixture. Remove the files after a short time, dry, sponge them with olive oil, wrap them up in porous paper, and put aside for use. Coarse files require to be immersed longer than fine.

Filigree Work on Silver—to clean.—A toothbrush is just the thing for cleaning the filigree of jewelry, and will answer as well for silverware.

Filling Composition for Painters and Grainers Use—(12 kinds).—1. Work finished in oil should receive a substantial filling consisting of equal parts by weight of whiting, plaster of Paris, pumice-stone, and litharge, to which may be added a little French yellow, asphaltum, Vandyke brown, and *terra di sienna*. Mix with one part

japan, two of boiled oil, and four of turpentine. Grind fine in a mill. Lay the filling on with a brush, rub it in well, let it set twenty minutes, then rub off clean. Let it harden for some time, rub smooth, and, if required, repeat the process. When the filling is all right, finish with linseed oil, applying with a brush, wipe off, and rub to a polish with fine cotton, and finish with any fine fabric. Some fill with rye flour, wheat flour, corn starch, Paris white, etc., ground fine in oil and turpentine, but when work is to be varnished, such filling should previously receive one or two good coats of shellac.

2. Boiled linseed oil, one quart; turpentine, three quarts; corn starch, five pounds; japan, one quart; calcined magnesia, two ounces. Mix thoroughly.

3. Whiting, six ounces; japan, one-half pint; boiled linseed oil, three-fourths pint; turpentine, one-half pint; corn starch, one ounce; mix well together and apply to the wood. On walnut wood add a little burned umber; on cherry a little Venetian red, to the above mixture.

4. On furniture apply a coat of boiled linseed oil, then immediately sprinkle dry whiting upon it, and rub it in well with your hand or a stiff brush, all over the surface; the whiting absorbs the oil, and fills the pores of the wood completely. For black walnut, add a little burned umber to the whiting; for cherry, a little Venetian red, etc., according to the color of the wood. Turned work can have it applied while in motion in the lathe. Furniture can afterward be finished with only one coat of varnish.

5. Terra alba is a very good and very cheap filling. Many painters have been most shamefully imposed on by parties selling the stuff at a high price.

6. FURNITURE PASTES.—Beeswax, spirits of turpentine and linseed oil, equal parts; melt and cool.

7. Beeswax, four ounces; turpentine, ten ounces; alkanet root to color; melt and strain.

8. Beeswax, one pound; linseed oil, five ounces; alkanet root, one-half ounce; melt and add five ounces turpentine; strain and cool.

9. Beeswax, four ounces; resin, one ounce; oil of turpentine, two ounces; digest until sufficiently colored, then add beeswax till dissolved, then add beeswax scraped small, four ounces; put the vessel into hot water, and stir till dissolved. If wanted *pale* the alkanet root should be omiited.

10. (White). White wax, one pound; liquor of potassa, one-half gallon; boil to a proper consistency.

11. Beeswax, one pound; soap, one-quarter pound; pearlash, three ounces, dissolved in water, one-half gallon; strain and boil as the last.

12. Yellow wax, eighteen parts; resin, one part; alkanet root, one part; turpentine, six parts; linseed oil, six parts. First steep the alkanet in oil with heat, and, when well colored, pour off the clear on the other ingredients, and again heat till all are dissolved.

13. FURNITURE CREAM.—Beeswax, one pound; soap, four ounces; pearlash, two ounces; soft water, one gallon; boil together until mixed.

Finger-nail Wash—Dr. Scott's wash to whiten the nails.—Diluted sulphuric acid, two drams; tincture of myrrh, one dram; spring water, four ounces. Mix. First cleanse with white soap, and then dip the fingers into the wash.

Fire—precautions in case of.—Should a fire break out send off to the nearest engine or police-station.

Fill buckets with water, carry them as near the fire as possible, dip a mop into the water, and throw it in showers on the fire until assistance arrives.

If a fire is violent, wet a blanket and throw it on the part which is in flames.

Should a fire break out in the kitchen-chimney, or any other, a wet blanket should be nailed to the upper ends of the mantel-piece, so as to cover the opening entirely, the fire will then go out of itself; for this purpose two knobs should be permanently fixed in the upper ends of the mantel-piece on which the blanket may be hitched.

Should the bed or window-curtains be on fire, lay hold of any woolen garment and beat it on the flames until extinguished.

Avoid leaving door or window open in the room where the fire has broken out, as the current of air increases the force of the fire.

Should the staircase be burning so as to cut off all communications, endeavor to escape by means of a trap-door in the roof, a ladder leading to which should always be at hand.

Avoid hurry and confusion; no person except a fire policeman, friend, or neighbor should be admitted.

If a lady's dress takes fire she should endeavor to roll herself in a rug, carpet, or the first woolen garment she meets.

It is a good precaution to have always at hand a large piece of baize, to throw over a female whose dress is burning, or to be wet and thrown over a fire that has recently broken out.

A solution of pearlash in water, thrown upon a fire, extinguishes it instantly. The proportion is a quarter of a pound dissolved in hot water and then poured into a bucket of common water.

It is recommended to householders to have two or three fire-buckets and a carriage mop with a long handle near at hand; they will be found essentially useful in case of fire.

All householders, but particularly hotel, tavern, and inn-keepers, should exercise a wise precaution by directing that the last person up should perambulate the premises previous to going to rest, to ascertain that all fires are safe and lights extinguished.

Fire—to release animals in case of.—It is a well-known fact that animals, especially horses, are so stupefied at fire, that they will not only make no effort to move, but in general resist all attempts to make them move. Experience has proved that the only effectual plan to get horses out of a stable in case of fire, is to put their harness

on, and when this is done they will quietly follow the groom. No time should be lost in carrying this plan into effect; if done in time it has never been known to fail.

Fire—what to do in case of.—Do not get confused; admit no one to your house except firemen, policemen or neighbors.

If a lady's or child's dress takes fire, endeavor to roll the person up in a rug, carpet, or any piece of woolen stuff.

Keep all doors and windows closed until the firemen arrive.

If smoke enters the room and it is difficult to stand erect, get your mouth as close to the floor as possible and breathe easy, as there is always a fresh current of air near the floor. A wet cloth over the mouth will greatly aid breathing.

The most rapid manner to extinguish flames when the clothing catches fire is to wrap the patient, or yourself, in a heavy woolen rug or blanket, and roll on the floor as rapidly as possible.

Fire Kindlers.—To make very nice fire kindlers, take resin any quantity, and melt it, putting in for each pound being used, from two to three ounces of tallow, and when all is hot stir in pine sawdust to make very thick; and, while yet hot, spread it out about one inch thick, upon boards which have fine sawdust sprinkled upon them, to prevent it from sticking. When cold, break up into lumps about one inch square. But if for sale, take a thin board and press upon it, while yet warm, to lay it off into inch squares; this makes it break regularly, if you press the crease sufficiently deep; grease the marking board to prevent it from sticking.

Fish Balls.—In the first place, the fish must be good. A great many people haven't the least idea of a good salt fish; they must first learn what a good fish is if they would have good balls. Cut up your fish and raw potatoes, taking twice the quantity of potatoes you have of fish, and boil them together half an hour; when done, drain off the water immediately, and beat the fish and potatoes thoroughly together. Now add pepper and salt, and if you have used half a pint of fish, one egg and a piece of butter half the size, beat all together, roll into balls and fry like doughnuts. Serve immediately. The fat must be as hot as for doughnuts. Faithfully follow this rule and then fish balls are good.

Fish Culture.—How to secure nearly double the usual product in fish raising.—I have closely observed the habits of many of the fishes that inhabit our southern streams, and among others the trout. Here they are migratory, or at least they leave the small streams in October, and return to them in March. They spawn in April, and the young brood are hatched out in a few days. Now my plan for increasing the yield is to have the eggs of the trout and other fishes well protected in their natural bed, where deposited by the mother, by placing over it a frame of fine wire net or cloth. But little attention is needed to find the nest of the trout or other fish; then as soon as the eggs are all deposited you have only to put the wire net over the nest and it will keep off nearly all of the fish and insects that prey

on the eggs. In this way I think you may be sure of seventy-five per cent. of the eggs producing young trout, and as these remain near the nest till old enough to escape from most of the dangers of their infant state, the wire net will save nearly all of them.

Fish—to fry.—Small fish are to be fried whole; large fish have the fleshy portions cut off with a very sharp knife and divided into strips (fillets) of a convenient size for serving. When cleaned and ready for cooking, wipe dry, and roll them in powdered cracker or bread crumbs. (Cracker, ready pulverized, is now sold at most grocery stores, under the name of "cracker dust.") Dip the fish, or pieces, in well beaten egg, and again roll them in cracker dust or crumbs, removing any lumps, so as to leave the surface smooth. Have the fat hot, and drop in the pieces, watching them carefully until they cook to a golden brown; then lift from the fat and lay upon thick paper to aborb the fat. Fillets of fish with the bones in, may be treated in the same way. By this method the fish are well flavored and much more digestible for weak stomachs. Fish are nourishing, and not only supply good food for the muscles, but also furnishes much phosphorus, which is a good brain-making material.

Fish—to preserve them alive for transportation from place to place.—Stop up the mouths of the fish with crumbs of bread steeped in brandy, and pour a very small quantity of brandy into them; pack them in clean straw. The fish will become quite torpid, and in this state may be kept ten or twelve days.

Fish—(steamed.)—Fish should never be boiled but steamed, so that no fine properties are dissolved in the water.

Fits—treatment of.—When these are brought on by indigestion, place the child in a warm bath immediately, give warm water, or a lobelia emetic, rub the skin briskly, etc., to get up an action. In brain disease the warm water is equally useful. In fact, unless the fit is constitutional, the warm bath will relieve the patient by drawing the blood to the surface.

Fits (Fainting).—Fits are sometimes very dangerous, and at others perfectly harmless; the question of danger depending altogether upon the causes which have produced them, and which are exceedingly various. For instance, fainting produced by disease of the heart is a very serious symptom indeed; whereas that arising from some slight cause, such as the sight of blood, etc., need cause no alarm whatever. The symptoms of simple fainting are so well known that it would be quite superfluous to enumerate them here. The treatment consists of laying the patient at full length upon his back, with his head upon a level with the rest of his body, loosening everything about the neck, dashing cold water into the face, and sprinkling vinegar and water about the mouth; applying smelling-salts to the nose; and, when the patient is able to swallow, in giving a little warm brandy and water or about twenty drops of sal-volatile in water. Should the attack be due to disease of the heart, place the person in an upright position, and give half a tumbler of cold brandy and water—half brandy, half water. If

the attack arises from debility, place the person in an upright position, and administer a glass of sherry. Should excitement or an overheated room be the cause, a reclining posture, and the administration of a wineglassful of camphor julep, to which twenty drops of sal-volatile have been added, are the best means of recovery.

Fits (Fainting).—Fainting is caused by the blood leaving the brain. Place the patient flat and allow the head to be lower than the body. Sprinkle cold water on the face. Hartshorn may be held near the nose, not to it. A half teaspoonful of aromatic spirits of ammonia, in a wineglassful of water, will tend to revive the patient. If the symptoms recur, send for a physician.

Flannel—to wash.—Cut up what soap may be needed and dissolve in a skillet of boiling water. Let it stand on the stove and simmer till every particle is dissolved. Never rub soap on the flannel, or allow a bit to settle on them. Nothing "fulls" flannel so badly as rubbing soap on it, or letting bits of it settle on the cloth. A place on which a bit of soap has lodged or been rubbed will have a different shade from the rest when dried, making the whole garment look spotted.

Take a small tub not quite half full of scalding hot or boiling water. Into this pour enough of the dissolved soap to make a rich suds, also some ammonia, a teaspoonful and a half to ten or twelve quarts of suds is a fair proportion. Stir this and the soap into the hot water till it is all thoroughly incorporated. Then put in the flannels. Two or three articles are enough to soak at one time. Press them well under the water, but turn them over in the suds occasionally while soaking. Let them remain in the water till it is cool enough to put the hands in without discomfort. While washing keep a good quantity of water at boiling heat on the range for rinsing purposes, and to keep the suds as hot as it can be used. Before one piece is washed and ready to be wrung out fill a small tub half full of clear hot water. Into this stir a little more "bluing" than would be used for cotton or linen. Shake out each piece as soon as washed, quickly, and throw at once into the hot rinsing water.

Rub the flannel as little as possible, but draw it repeatedly through the hands, squeezing rather than rubbing. Harsh rubbing thickens and injures the fabric. Never wring with a wringer, as the pressure mats the nap down so closely as to destroy all the soft, fleecy look of good flannel. Wring with the hands as dry as possible, then rinse and wring out again; and when as dry as it can be made by hand, snap out, stretch and pull out into the true shape; dry in the open air, if possible. Bring in when not quite dry, roll up a short time, and iron while still a little damp, so that each part can be more readily brought into shape. Pressing, when ironing, is better for the flannel than rubbing. It does not make the fabric feel so hard and wiry.

Scarlet flannel is poisonous to some skins if used before washing, and as one is not always sure how one may be affected by it, it is safer to give it a scald in hot water with a little soap—not enough to

make a strong suds. Let it stand and soak a few minutes, then wring out and treat like other flannels.

Flannel—to whiten.—It is said that flannel, which has become yellow by age, may be restored to its original whiteness by the use of a solution of one and a half pounds of white Marseilles soap in fifty pounds of soft river water, to which is added two-thirds of an ounce of spirit of aqua ammonia, and the whole thoroughly mixed. The flannel is to be immersed in this solution and well stirred around, and afterward washed off in pure water. The same result may also be obtained still more quickly by immersing the flannel for an hour in a dilute solution of acid sulphate of soda, and then stirring in dilute hydrochloric acid in the proportion of one part of acid to fifty of water. The vessel is then to be covered over and allowed to remain for a quarter of an hour, when the articles are to be removed and thoroughly washed.

Flat-irons—to smooth.—If your flat-irons are rough, rub them with fine salt, and it will make them smooth.

Flaxseed Tea—ways to make.—Put two tablespoonfuls whole flaxseed in a pint of boiling water and boil fifteen minutes; cut up one lemon and put in a pitcher with two tablespoonfuls of sugar. Strain the tea boiling hot through a wire strainer into the pitcher and stir together. Good for cough and sore throat.

2. Take three tablespoonfuls of linseed, about one pint of water, and boil for ten minutes. Strain off the water, put in a jug with two lemons, cut in thin slices; put in also some brown sugar. A wineglassful of wine is an improvement. This has been found most nourishing for invalids.

3. Macerate one ounce flaxseed and half an ounce of bruised liquorice root in one pint of boiling water for two hours, in a tightly-closed vessel; filter, and add one fluid ounce of lemon juice. This is a good drink in cases of catarrh.

Flesh-worms on the skin.—When black spots, "flesh-worms," as they are called, become troublesome, it would be advisable to adopt the following remedy, which, though simple, is very efficacious: Mix some flour of sulphur in a little milk, let it stand for a couple of hours, and then, without disturbing the sulphur, use the milk as a lotion; to be well rubbed into the skin with a towel. Almost immediately afterward, the skin may be washed with soap and cold water. Cold cream should be rubbed in at bedtime. The spots will shortly disappear.

Flies—to destroy.—Take half a teaspoonful of black pepper, one teaspoonful of brown sugar, and one tablespoonful of cream; mix them well together and place them in a room on a plate, where the flies are troublesome, and they will soon disappear.

Floating Island.—Put a quart of milk over the fire in a shallow kettle, let it come to a boil; beat the whites of four eggs to a froth and add some white sugar; let the whites of the eggs scald a moment in the milk, then dip out; beat the yolks of the eggs with sugar to suit

the taste; stir this into the boiling milk; as soon as it boils turn into a shallow dish; lay the whites on top. Ornament with colored sugar sands if you like.

Floating Island—how to make.—Put on the stove a quart of milk sweetened and flavored to taste. Just as soon as it reaches boiling point, stir in the well-beaten yolks of five eggs and allow it to come to a boil again, stirring all the time. Then remove from the fire and set aside to cool. Three of the whites will be sufficient for the islands. Beat to a stiff froth with a fork, which is better than an egg-beater for this particular purpose, and place in a colandar. Now comes the "kink." Have ready a tea-kettle of boiling water, from which pour rapidly but thoroughly upon the beaten whites, until the water has touched every part. Set down for a few moments to finish draining, after which you can take a knife and cut into little blocks and lay upon your custard, which has been previously poured into the dish from which it is to be served. By this means, the whites will retain their form, and not aggravate you by dissolving into thin air at a critical juncture. It also does away with that raw taste. Bits of jelly dropped upon each island, give the dish an inviting appearance.

Float, or French Custard.—Beat the yolks of five eggs with ten tablespoonfuls of sugar, and stir in a quart of new milk; place over the fire and stir until it creams. Do not cook too long. Pour into a dish that can be covered. Spread over the top the whites of the five eggs, beaten to a stiff froth, with a tablespoonful of pulverized sugar. Both custard and whites of the eggs should be flavored with lemon or vanilla.

Floors—to stain and polish.—A correspondent who thinks that carpets are too expensive for daily use, and that something that is cheaper and at the same time more easily kept clean is needed, says that a friend's hall and kitchen were floored, as he supposed with black walnut and pine; but he was informed that the owner had caused the floors to be smoothly laid, and with his own hands had stained each alternate board a dark color, and then with shellac had finished the whole with a fine polish. He says: "I shall have my hall and dining-room floors plained smoothly and evenly by a carpenter, and then myself rub carefully with a sponge or brush, avoiding any daubs over the seam, into each alternate board a stain prepared as follows: One-quarter of a pound of asphaltum and half a pound of beeswax; if too light in color, add asphaltum, though that must be done with caution, as very little will graduate the shade, and black walnut is not what its name indicates, but a rich dark brown; or burned umber in alcohol, to the proper consistency of easy application, may be used without the beeswax; and, after a thin coat of shellac has been laid over the whole and the surface smoothed over with sandpaper, a coat of common varnish will give it a splendid finish. A breadth of carpet or matting, or a piece of oilcloth laid down, will protect it where the greatest wear comes. The narrower

the floor the finer will be the effect; but in any case it will excite your own and your friends' admiration and prove a joy forever."

Floors—stain for.—To strong lye of wood ashes add enough copperas for the required oak shade. Put this on with a mop and varnish afterward.

Florida Water.—Half pint proof spirits, two drams oil lemon, half dram oil rosemary. Mix.

Flounders—how to select.—Flounders, and all white flat fish, are rigid and firm when fresh; the under side should be of a rich cream color. When out of season, or too long kept, this becomes a bluish white, and the flesh soft and flaccid. A clear, bright eye in fish is also a mark of being fresh and good.

Flour—how to select.—Look at its color; if it is white, with a slightly yellowish or straw colored tint, it is a good sign. If it is very white, with a bluish cast with white specks in it, the flour is not good. Examine its adhesiveness; wet and knead a little of it between the fingers; if it works dry and elastic, it is good; if it works soft and sticky, it is poor. Flour made from spring wheat is likely to be sticky. Throw a little lump of dry flour against a dry, smooth, perpendicular surface; if it adheres in a lump, the flour has life in it; if it falls like powder, it is bad. Squeeze some of the flour in your hands; if it retains the shape given by the pressure, that, too, is a good sign. Flour that will stand all these tests it is safe to buy.

Flour—boiled for invalids.—Tie a pound of fine flour tightly and compactly in a linen cloth, throw it into boiling water, and let it boil for three hours; when it is cold it will be found to be a hard, dry mass, from which the outside layer will peel like a skin. Grate a part of the remainder, and use it to thicken boiling milk or to make a gruel.

Flour—to brown.—Spread on a tin plate, set on the stove or in a very hot oven, and stir constantly after it begins to color, until it is brown all through. Keep in a glass jar, shake occasionally, and use for gravies, etc.

Flour (Self-raising).—Kiln-dried flour, one hundred pounds; tartaric acid, ten ounces; mix thoroughly. After two or three days add of bi-carbonate soda, twelve ounces; lump sugar, one half pound; common salt, one and one-half pounds; mix, and pass through the "dressing machine." Have all the articles perfectly dry, and separately reduced to fine powder before adding to the flour. Mix with cold water, and bake at once. It produces light and porous bread.

Flowers—arrangement of.—Flowers may be arranged either according to the harmony or contrast of colors. Red harmonizes with orange, orange with yellow, violet with red, indigo with violet, blue with indigo, and green with blue. Green is the contrast of red, sky-blue to orange, yellow to violet, blue to orange-red, indigo to orange-yellow, and violet to bluish-green. To find the contrast to any flower, cut a small circular piece out of its petals, place it upon white paper, look at it steadily with one eye for a few seconds, without letting the eye-lids close, then look from the colored circle to another part of

the white paper, when the circle of another color will be apparent. This color is the true contrast, or complimentary color. Tastes differ as to whether the effect of arranging the flowers according to contrast or complimentary color is more pleasing to the eye than according to harmonies. The former, however, is the most in favor. To carry it out, a blue flower should be placed next to an orange flower, a yellow near a violet, and a red or a white should have plenty of foliage around it. White contrasts with blue or orange, or still better, with red or pink, but not with yellow or violet.

Flowers and Ferns—for ornamenting.—Nothing beautifies a room more sensibly than a few tastefully arranged flowers or plants. In summer flowers are always available, and in winter their place may be agreeably supplied by sprigs of evergreens, dried grasses, or immortelles. A few creeping plants, or ivy, can be obtained at any time during cold weather, and a few twigs of these brought into use whenever required. Those who keep house-plants always have the materials at hand for decorations, and they should be used liberally and constantly, varying the arrangement as often and widely as possible. A charming house ornament is supplied by a fern-case, which may be constructed quite inexpensively, while the plants required, being indigenous to our woods and meadows, can be easily collected, so that the pleasure of having a case well filled with finely grown plants can be enjoyed by those who do not wish to expend largely for this purpose.

Flowers—to preserve.—By the following process flowers may be preserved without losing their beauty of tint or form: Get a quantity of fine sand, wash it until the last water that runs off is quite clear, then put the wet sand on a board placed aslant over a pan to drain the water off. Dry the sand perfectly by the fire, or in the sun. Sift it twice, once through a fine sieve, next through a coarse one; thus the sand will become nearly all of the same sized particles, and be very fine. Cut the flowers when full blown, and in dry weather, not moist with dew or rain. Get a box of sufficient size, fill it with dry sand so high that the flowers may stand erect in it by their imbeded stems. Then put some sand in the sieve, and tenderly sift it over the flowers, so as not to break them; do not crumple or displace a petal. Keep the box in a warm, dry place, but not too hot. The temperature should never exceed one hundred degrees. The sand absorbs the moisture of the flowers. As soon as you think the flowers are thoroughly dry, open the box and slant it so as to let the upper sand run out gently; then lift them out by their stems. The flowers will be perfect, but a little brittle. In time the atmosphere will make them less so.

Flowers—for exhibition.—To place flowers on exhibition and keep fresh, and to show off to good advantage, get large flakes of moss from logs, and, after putting an inch or so of sand in the bottom of a shallow box, lay on this the moss, and thrust into this the flower stems; then, by watering occasionally, they keep perfectly fresh for a

number or days. Crosses, rings, etc., can be formed in these boxes, and having sprigs of evergreens tacked on the sides of the boxes the effect is beautiful. Moss placed in fancy-shaped baskets and in this the flowers make a pretty show.

Flowers and Fruit—how to preserve.—Fruit and flowers may be preserved from decay and fading by immersing them in a solution of gum arabic and water two or three times, waiting a sufficient time between each immersion to allow the gum to dry. This process covers the surface of the fruit with a thin coat of gum, which is entirely impervious to the air, and thus prevents the decay of the fruit or the gathering of the flower. Roses thus preserved have all the beauty of freshly plucked ones, though they have been separated from the parent stock many months.

Flowers—to revive when withered.—Plunge the stems into boiling water, and keep them there till the water is cold. They will quite revive. The stems may then be cut, and the flowers put to stand in cold water.

Flowers—to preserve in water.—Mix a little carbonate of soda with the water in which flowers are immersed, and it will preserve them for a fortnight. Common saltpetre is also a very good preservative.

Flower Seeds—autumn sowing of.—Persons say that the finest flowers they ever had of certain annuals were from "volunteer" plants from self-grown seeds. The real reason for their superiority is not due to the manner, but to the time of sowing. Seeds are "self-grown" soon after they are ripe, and the superiority of the plants from these suggests autumn sowing. The annual flowers classed as "hardy" should as a general thing, if practicable, be sown in autumn. Larkspurs and pansies are incomparably finer when thus sown. Clarkia, whitlavia, gilia, and nearly all the rest of the California annual, to give the best results, should be sown in autumn.

Flowers—to pack for shipment.—Cut flowers should be packed in a perfectly dry condition, and whatever packing materials are used should also be dry. Considerable quantities are sent in boxes by rail to distances varying from fifty to three hundred miles in the following manner with perfect success: The bottom and sides of the box is lined with spray and fern fronds; upon that at the bottom is placed a compact layer of buds and such flowers as will not suffer from a little pressure; then comes another layer with the more delicate flowers enveloped singly in a thin piece of wadding, all packed closely. This is followed by a sheet of silver paper, upon which a third and last layer of padded flowers is placed. A thin sheet of soft wadding is placed upon the top, and the lid fastened in the same manner as the fruit boxes.

Flower Stand—to make.—A very pretty flower stand can be made out of a table, a bucket, and half a dozen old tin cans. Place the bucket in the center of the table. Punch several holes in the bottom of each can, and screw them firmly to the table by screws in the holes.

Arches of stout wire may be made across the top of the cans. For ferns planted in the cans, which require a great deal of water, cover the top of the table with a shallow pan to catch the drip. Other plants should only have the soil kept damp. Geraniums are fine for winter blooming, as are also coleus, fuchsias, and petunias. Some kind of a vine should be planted in each of the corner cans. Trailing plants produce a good effect.

Flowers—to arrange.—A very good device for arranging flowers consists of a piece of cork of about a quarter of an inch thick, circular in form, and perforated with holes like the nose of a watering-pot. The diameter is to correspond to the size of the saucer or shallow dish with which it is to be used. The cork floating on the top of the water supports the flowers, whose stems are inserted through the holes. For the display of small flowers, and those having short stems, this method seems well adapted; possibly it may be better than damp sand, though that is doubtful; but, as the cork may be preserved, it would always be at hand, and it might not be convenient sometimes to procure sand.

Fluid—for washing cloths.—For washing alpaca, camel's hair, and other woolen goods, and for removing marks made on furniture, carpets, rugs, etc.: Four ounces ammonia, four ounces white castile soap, two ounces alcohol, two ounces glycerine, two ounces ether. Cut the soap fine, dissolve in one quart of water over the fire; add four quarts of water. When nearly cold, add the other ingredients. This will make nearly eight quarts. It must be put in a bottle and stoppered tight. It will keep good any length of time.

Fluid (Silver Plating.)—Dissolve one ounce of nitrate of silver, in crystals, in twelve ounces of soft water; then dissolve in the water two ounces cyanuret of potash; shake the whole together, and let it stand till it becomes clear. Have ready some half-ounce vials, and fill half full of Paris white, or fine whiting; and then fill up the bottles with the liquor, and it is ready for use. The whiting does not increase the coating powder; it only helps to clean the articles, and save the silver fluid, by half filling the bottles.

Fluid—for soldering and tinning.—The following compounds are useful for soldering or tinning: Tin—one part muriatic acid, with as much zinc as it will dissolve; add two parts of water and some sal ammoniac. Brass and copper—one pound muriatic acid, four ounces zinc, five ounces sal ammoniac. Zinc—one pound muriatic acid, and two ounces sal ammoniac, with all the zinc it will dissolve, and three pints of water. Iron—one pound of muriatic acid, six ounces sperm tallow, four ounces sal ammoniac. Gold and silver—one pound muriatic acid, eight ounces sperm tallow, and eight ounces sal ammoniac.

Fluid (Soldering).—Take two ounces muriatic acid; add zinc till bubbles cease to rise; add one-half teaspoonful of sal-ammoniac.

Fluid (Washing).—Take five quarts of water, one-half pound of lime, one pound of sal-soda, and let it come to a boiling point; then settle, pour off and bottle. Use one and a half cups of this to a wash-

ing of five persons. Soak clothes in cold water over night. After putting fluid in a boiler of cold water, let it come to a boiling point; put in clothes and boil half an hour. If any rubbing is necessary it will be very easy; then rinse in two waters. The above will not injure the clothes.

Fluted Reamer—to dip properly.—Dip it perpendicularly to a short distance beyond the fluting—that is to say, about half an inch and withdraw and return it several times. This hardens all the lips, and prevents it cracking off at the water's edge, which is the case when a piece of steel is dipped in to a certain depth, and allowed to cool without moving.

Fluid (Washing).—Take one-half pound soda ash, and a half a pound of unslaked lime, and put them in a gallon of water; boil twenty minutes; let it stand till cool, then drain off and put in a jug or jar. Soak your dirty clothes over night, or until they are wet through, then wring, and rub on plenty of soap on the dirtiest places, and, in one boiler of clothes, well covered with water, add one teacupful of the fluid; boil half an hour or more; rub through one water, and rinse well, and your clothes will look better than by the old way of washing twice before boiling. This is the original recipe; but to economize, I put one quart of good lye, made from wood ashes, in the place of soda ash, and I found that it was just as good, and cheaper.

Fly (Green)—to destroy.—The stems and leaves of the tomato are well boiled in water, and when the liquor is cold it is syringed over plants attacked by insects. It at once destroys black or green fly, caterpillars, etc.; and it leaves behind a peculiar odor which prevents insects from coming again for a long time. The author states that he found this remedy more effectual than fumigating, washing, etc. Through neglect, a house of camelias had become almost hopelessly infested with black lice, but two syringings with tomato plant decoction thoroughly cleansed them.

Fly in Turnips—to prevent.—From experiments lately made, it has been ascertained that lime sown by hand, or distributed by a machine, is an infallible protection to turnips against the ravages of this destructive insect. It should be applied as soon as the turnips come up, and in the same daily rotation in which they were sown. The lime should be slaked immediately before it is used, if the air be not sufficiently moist to render that operation unnecessary.

Fly Paper.—Coat paper with turpentine varnish, and oil it to keep the varnish from drying.

Food for Singing Birds.—Blanched sweet almonds, pulverized, one-half pound; pea meal, one pound; saffron, three grains; yolks of two hard boiled eggs. Reduce all to a powder by rubbing through a sieve. Place the mixture in a frying-pan over a fire, and add two ounces butter and two ounces honey. Slightly cook for a few minutes, stirring well, then set off to cool, and preserve in a closely corked bottle.

Foot-bath.—Remember never to have the foot-bath so hot as to occasion a disagreeable sensation; this would drive the blood to the head, instead of drawing it from it. If possible, when bathing the feet, have a warm bath for the hands also; the object being to bring the heat to the extremities.

Foot Sprains—remedy for.—The instep is very liable to be sprained, and so indeed are other parts of the foot. Whenever sprains occur, let the following simple remedy be tried, as it will frequently give relief. Grease the thumbs of both hands, or dip them in any soap liniment; then slide the fingers of each hand under the foot, at the same time press the sprained part with the thumbs as they move along. Continue this for a quarter of an hour, and, if necessary, repeat the operation; increase the pressure of the thumbs very gradually, especially if there is much pain.

Forcing the Beard—liquid for.—Cologne, two ounces; liquid hartshorn, one dram; tincture cantharides, two drams; oil rosemary, twelve drops; lavender, twelve drops. Apply to the face daily and await results. Said to be reliable.

Forest leaves—for stables and yards.—We do not think that farmers set as much value upon forest leaves as they should do. They possess many good qualities. They have a pleasant smell, absorb the moisture, and through the winter are converted into excellent manure. They can be most conveniently gathered after the first snow, or at least before the wintry blasts have scattered them. They then lay compactly, and being moist can be handled with great facility. A cart with a few standards stuck in the sides will hold a considerable quantity, and the best thing to gather them or load them is a wooden hand rake; a wooden four tined straw fork is also very handy when the leaves are moist. They can be gathered too when other labor about the farm is slack. There are leaves, also, about the garden, yard and orchards, that should be gathered and used. They are good for covering vines, cabbage, and half hardy shrubbery after being laid down. They do not admit much moisture, and are excellent protection against frost.

Founder—remedy for.—Draw about a gallon of blood from the neck; then drench the horse with linseed oil, one quart; now rub the fore-legs long and well with water as hot as can be borne without scalding.

Fowls—how to select.—Common domestic fowls, when young, have the legs and combs smooth; when old, they are rough, and on the breast long hairs are found instead of feathers. Fowls and chickens should be plump on the breast, fat on the back, and white legged.

Fowl—to broil.—Split the fowl down the back; season it very well with pepper and put it on the gridiron, with the inner part next the fire, which must be very clear. Hold the gridiron at a considerable distance from the fire, and allow the fowl to remain until it is nearly half done; then turn it, taking great care that it does not burn; broil it of a fine brown, and serve it up with stewed mushrooms. A duck

may be broiled in the same way. If the fowl is very large, half roast it, then cut it into quarters, and finish it on the gridiron. It will take from half to three-quarters of an hour to cook.

Fowls—to fatten in a short time.—Mix together ground rice well scalded with milk, and add some coarse sugar. Feed them with this in the daytime, but not too much at once. Let it be rather thick. Chopped onions are excellent for all kinds of fowl, and quickly drive all kinds of vermin away.

Frames (gilt)—to clean.—When the gilt frames of pictures or looking-glasses, or the gilt molding of rooms, have got specks of dirt upon them, from flies or other causes, they can be cleaned with the white of egg, gently rubbed on with a camel's hair pencil.

Frangipanni.—Spirits, one gallon; oil bergamot, one ounce; oil of lemon, one ounce; macerate for four days, frequently shaking; then add water, one gallon; orange-flower water, one pint; essence of vanilla, two ounces. Mix.

Freckles—to remove.—Those anxious to get rid of freckles can make a compound which commonly removes them if they will grate horseradish fine, let it stand a few hours in buttermilk, and strain it and use to wash night and morning. Or squeeze the juice of a lemon in a goblet of water and use in the same way. The regime should be attended to, and should be of such a nature that the bowels and kidneys will do their duty. Daily bathing, with much friction, should not be neglected, and the Turkish bath taken occasionally, if it is convenient.

Freckles—cure for.—Wash in fresh buttermilk every morning, and rinse the face in tepid water; then use a soft towel. Freckles may also be removed by applying to the face a solution of nitre and water. Another good wash for freckles is made by dissolving three grains of borax in five drams each of rose water and orange-flower water. There are many remedies for freckles, but there is none that will banish them entirely.

Freckles—to remove.—Take half a dram of muriate of ammonia, two drams of lavender, and half a pint of distilled water. Apply this mixture with a sponge two or three times a day.

Freckles and Tan—to remove.—Tincture of benzoin, one pint; tincture tolu, one-half pint; oil rosemary, one-half ounce. Put one teaspoonful of the above mixture in one-quarter pint of water, and with a towel wash the face night and morning.

Freckles and Sunburn.—After washing in cold water, use a little of the following lotion: Mix a tablespoonful of diluted muriatic acid with an ounce of rose-water, eight ounces of water, and one ounce of rectified spirits of wine.

Freezing Preparation.—Common sal-ammoniac, well pulverized, one part; saltpetre, two parts; mix well together. Then take common soda, well pulverized. To use take equal quantities of these preparations (which must be kept separate and well covered previous to using) and put them in the freezing pot; add of water a proper

quantity, and put in the article to be frozen in a proper vessel; cover up, and your wants will soon be supplied. For freezing cream or wines this cannot be beat.

French Milk of Roses.—Two and one-half pints of rose-water, one-half pint of rosemary water, two ounces of tincture of storan, two ounces of tincture of benzoin, one-half ounce of esprit de rose. First mix the rose-water and rosemary water, and then add the other ingredients. This is a useful wash for the complexion.

Fresh-blown Flowers in Winter.—Choose some of the most perfect buds of the flowers you wish to preserve, such as are latest in blooming and are ready to open; cut them off with a pair of scissors, leaving to each, if possible, a piece of stem about three inches long; cover the end of the stem immediately with sealing-wax, and when the buds are a little shrunk and wrinkled wrap each of them up separately in a piece of paper, perfectly clean and dry; then lock them up in a dry box or drawer, and they will keep without corrupting. In winter, or at any time, when you would have the flowers blow, take the buds at night and cut off the end of the stem sealed with wax, and put the buds into water wherein a little nitre of salt has been diffused; the next day you will have the pleasure of seeing the buds open and expand themselves, and the flowers display their most lovely colors and breathe their agreeable odors.

Fritters (Orange).—One pound of flour, one pint of milk with a teaspoonful of salt in it, and one-quarter of a pound of melted butter, and three eggs beaten very light. Prepare four oranges by removing the yellow rind and every particle of white pith; divide into small pieces without breaking the skin. In each spoonful of batter put a piece of orange, and fry a golden brown; sift powdered sugar over as soon as taken from the pan.

Frosting—for cake.—To the white of one egg beaten to a froth, add two heaping teaspoonfuls of corn-starch and as much dry powdered sugar as you can stir in. Bake your cake first, then make your frosting, then remove the cake from the baking pan and spread the frosting over the top of the loaf, making it smooth with a knife or spoon, and put it in a warm (not hot) oven until it hardens so that the frosting will not adhere to the finger in touching it, take it out, and put in a cool, dry place, and it will be hard enough to cut in a few hours. The above makes one loaf. I have no rule as to the quantity of sugar to be used.

Frosting (Chocolate).—Whites of three eggs, one and a half cups of sugar, one teaspoonful of vanilla, three heaping teaspoonfuls of scraped chocolate.

Frosting—ways to make.—To the white of one egg allow one cup of sugar, and the same proportion for any number of eggs according to the quality of frosting to be done. Beat the mixture a great deal, and when the frosting remains in position, it is a test that it has been mixed enough. Fine granulated sugar gives a nicer gloss than powdered. If desired, add the juice of one lemon. The beating necessa-

ry depends upon the freshness of the eggs, and the strength and physical endurance of the mixer. The sugar must be added to the eggs very gradually, else too much will be added, and the frosting be too hard. The first frosting on cake should be put on when the cake is hot; it will then stick, as the frosting will enter the pores of the cake. The second coating can be put on when the first is "set" or hard. Do not press hard against the cake, but simply spread lightly with a spoon. Mark into slices with the blade of a knife, but be sure the blade is free of frosting every time it is drawn over the cake. The decorating frosting must be stiffer than that used for the simple covering; this is done by adding more sugar. Ornamental frosting bags are made of a square piece of rubber cloth, placing the opposite corners together and sewing up the side; keep the seam on the outside. Cut a small funnel-shaped tube in the small end of the bag, and put in the frosting; twist up the large end of the bag, and by pressing on the top the flow of frosting can be regulated. Frosting bags cost sixty-two cents each at the stores, but a quarter of a yard of rubber cloth, costing twenty-five cents, will make four bags. The decorating frosting will harden in two hours. If any is left over, it will, if kept in an air-tight jar, do to use for the first frosting next time; but not for decorating.

Frosting—with gelatine.—Dissolve a large pinch of gelatine in six tablespoonfuls of boiling water, strain, thicken with sugar and flavor with lemon. Enough for two cakes.

Frost-bites—treatment of.—For frost-bites, rub the affected parts with pure oil of peppermint. It will also prevent the after effect of chilblains. Care should be taken to use only the pure oil, and not the essence of peppermint, as the essence will not have the desired effect.

Frost Feet—to cure.—For frosted feet, mix together one ounce of turpentine and three-eighths of an ounce of oil of sassafras. Apply the solution morning and evening.

Frozen Limbs—cure for.—Dissolve from one-quarter to half a pound of alum in a gallon of warm water, and immerse the feet or hands in it when frozen, for ten or fifteen minutes, and a cure will be effected.

Fruit Trees—hints on pruning.—From an experience of nearly fifty years in pruning fruit trees, I would say my preference would be to prune in winter, and next to that, after the leaves are all out and as late as the middle of June. It is true that the wounds from winter pruning do not heal as rapidly as from summer pruning, but I cannot see, after all, but the winter-pruned trees heal as sound as the summer-pruned ones. In all cases of pruning I would recommend a coat of thick paint, or grafting-wax, to be spread over the wounds, especially when the limb cut is over an inch in diamater. I never could find any difference in the productiveness of fruit on account of different seasons of pruning. My motto is, low heads for all kinds of fruit trees, with an opening in the top of apple trees. Rhode Island

Greening trees do not need low heads at starting, as the lower limbs always incline toward the ground, and the top limbs never run high. Pear trees of most varieties should be headed back on the top or top limbs, as they frequently grow entirely too high, and the lower limbs are not often in the way. Peach trees need very little pruning, and I would not advise, while planting them, the cutting off of all limbs and the top, leaving nothing but a stump or cane with the roots; this is a common custom, or has been here, but this method has been weighed in the balance and found wanting. I allow the main stem of the peach to run up as far as it will, and try while the tree is small to form a symmetrical head. A very little trimming will accomplish this. Do not cut off large limbs from any kind of fruit or ornamental tree close to the trunk or large limb of the tree; if large limbs are cut, they should be cut one or two feet from the trunk or larger limb, and these stumps should be shortened in according as they will bear it, at two or three different times, within the space of from six to ten years. I know these stumps are unsightly, but I prefer health in trees to sightliness. I have apple trees that were treated in this way over six years ago, and are not cut short enough yet, and the stumps have none of them died as far back as the trunk or limbs they were taken from. I know of quite a number of apple trees with the large limbs cut close (since mine were treated as above stated) that are now dead, caused by the rot eating into the trees from the close cuts, while my trees are in the best of health. The theory of this is, that the trees continue to grow as usual while the stump grows but very little, and the tree gets so much larger than the stump that the cutting of the stump affects the tree but very little.

Fruit Canning.—Those housekeepers who have not been successful in their attempts at fruit canning, will find the following an excellent recipe: Place the fruit in either a granite, iron, or porcelain kettle; never use common iron, brass, or tin for this purpose. Allow it to boil for about five minutes. Have the jars in readiness, and standing in a vessel of warm water, so that they may be heated gradually. Just before filling the jar with fruit, dip a towel in boiling water and wrap it around the jar, and tuck the corners under the bottom for the jar to rest upon. Fill the jar quickly, and when full, thrust a knife to the bottom and stir it around several times, and the air bubbles will rise to the top. Seal as tight as possible, and stand the jar on the top in a moderately cool place. In a few hours turn the jar up, and try to seal tighter, standing it again on the top. Continue this several times, or until the cover is tightly screwed on. Stand the jars in a cool, dark place in the cellar, looking at them occasionally for a few days.

Fruit (Canned)—to remove.—To any one so unfortunate as to be obliged to move, it may be of value to know that canned fruit may be transported without fear of loss, if the glass jars are securely packed in sawdust. This must be very firmly pressed down so that the jars cannot be moved by the jarring of the wagon or car.

Fruit—to can without cooking.—Heating the fruit tends more or less to the injury of the flavor, and it has been found that by filling the jars with fruit, and then with pure cold water, and allowing them to stand until all the confined air has escaped, the fruit will, if then sealed perfectly, keep indefinitely, without change or loss of original flavor.

Fruit-jars—to prevent breaking.—Canning fruit is hot enough work without any hot water or hot jars around. Instead of this, wrap the jars with a towel saturated with cold water, and pour in your hot fruit. Any one who has not tried it will naturally say: "That is the sure way to break the jars." I would say, just try one jar and see. We have canned hundreds of jars, one and two quarts, and have never broken one in filling. I can't explain why, but simply know that it is the fact.

Fruit-jars—to render air-tight.—When canning fruit have a cup of flour paste ready; if your rubbers are old, or the zinc rings or covers are bent a little, you may still make them air-tight with the paste. If you are at all doubtful about the condition of your can it is a good notion to use the paste.

Fruit-cans (Tin)—to utilize.—Perhaps one of the most appropriate uses of an old fruit-can that can be devised is to make it contribute to the growth of new fruit to fill new cans. This is done in the following manner: The can is pierced with one or more pin holes, and then sunk into the earth near the roots of the strawberry or tomato or other plants. The pin holes are to be of such size that when the can is filled with water the fluid can only escape into the ground very slowly. Thus a quart can, properly arranged, will extend its irrigation to the plant through a period of several days; the can is then refilled. Practical trials of this method of irrigation leave no doubt of its success. Plants thus watered flourish and yield the most bounteous returns throughout the longest droughts. In all warm localities, where water is scarce, the planting of old fruit-cans, as here indicated, will be found profitable as a regular gardening operation.

Fruit—how to dry.—Pare and core peaches, pears, quinces, or citron; make a syrup flavored with lemon peel; boil the fruit till done; drain it in a colander and spread on dishes. Place in the sunshine or a moderately heated oven until nearly dry. Sprinkle with loaf sugar, dry a little more, then pack them in boxes and put in a cool place. Citron must be boiled in clear water till you can pierce it with a fork, and drained through a colander before it is put in the syrup; then let it boil until it is clear. Pour boiling water on the lemon rind and let it stand over night before flavoring the syrup with it, and it can be dried with the fruit.

Fruit Drying Hints.—Families of farmers engaged in drying fruits are reminded that the solar heat is not sufficiently intense to destroy insect eggs that may have been deposited in the fruit when green, or in the process of drying. If put in a moderately warm

oven for ten minutes all parasites and their eggs would be destroyed. In countries where fruits are extensively dried the treatment is practiced generally.

Fruit Extracts, etc.—how to make.—Good alcohol, one quart; oil of lemon, two ounces. Break and bruise the peel of four lemons, and add to them alcohol for a few days, then filter. For currants, peaches, raspberries, pine-apples, strawberries, blackberries, etc., take alcohol and water half and half, and pour over the fruit, entirely covering it, and let it stand for a few days. For essence of cinnamon, nutmeg, mace, vanilla, etc., pulverize either article thoroughly, and put about two ounces of the resulting powder to each pint of reduced alcohol, agitate the mixture frequently for two weeks, then filter and color as desired.

Fruits—to keep fresh.—Resin, two pounds; tallow, two ounces; beeswax, two ounces. Melt slowly over the fire in an iron pot, but don't boil. Take the fruit separately, and rub it over with pulverized chalk or whiting (to prevent the coating from adhering to the fruit), then dip it into the solution once, and hold it up a moment to set the coating, then pack away carefully in barrels, boxes, or on shelves, in a cool place. Unequaled for preserving apples, pears, lemons, etc.

Fruit Juice—to preserve without heat.—Ingredients: Ten pounds of fresh-gathered, picked, red-ripe currants, or other fruit, two quarts cold water, five ounces tartaric acid, six pounds of coarse sifted sugar. Put the fruit in a large earthen pan, pour the water with the tartaric acid dissolved in it over the fruit, cover the pan with some kind of lid, and allow the whole to steep for twenty-four hours in a cold place, and it would be all the better if the pan containing the fruit could be immersed in rough ice. Next, pour the steeped fruit into a suspended stout flannel bag, and when all the juice has run through, tie up the open end of the bag, and place it on a large earthen dish, with another dish upon it; place a heavy weight upon this, to press out all the remaining juice, and then mix it with the other juice. You now put the sifted sugar into the juice, and stir both together occasionally, until the sugar is dissolved, and then bottle up the syrup, cork, and tie down the bottles with wire, and keep them in the ice well or in a cold cellar, in a reclining position.

Fruits—to pack for long distances.—Take a box of the proper size, soft paper, and sweet bran. Place a layer of bran on the bottom, then each bunch of grapes is held by the hand over a sheet of the paper; the four corners of the paper are brought up to the stalk and nicely secured; then laid on its side in the box, and so on until the first layer is finished. Then dust on a layer of bran, giving the box a gentle shake as you proceed. Begin the second layer as the first, and so on until the whole is full. The bloom of the fruit is thus preserved as fresh, at the end of a journey of five hundred miles, as if they were newly taken from the tree. Never fails to preserve grapes, peaches, apricots, and other fruit.

Fruit—to preserve without sugar.—Fill some stone wide-mouthed

bottles with the fruit carefully picked, and set them in a copper or large kettle; then fill the kettle with cold water nearly up to the mouths of the bottles. Corks should be prepared to fit the bottles, and a cloth should be put under the bottoms of the bottles to prevent their cracking with the heat. Light the fire under the kettle, and heat the water to one hundred and sixty or one hundred and seventy degrees. This heat should be continued for half an hour, when the fruit will be sufficiently scalded; after that, fill up the bottles with boiling water to within an inch of the cork, and cork them tightly. Lay the bottles on their sides; change the position of the bottles once or twice a week during the first two months, turning them round to prevent any fermentation that might take place. Fruits could also be kept by the process mentioned above for meats, remembering that they are to be scalded only, not boiled, as in the case with meats.

Fruit Trees—to clear from insects.—In three or four gallons of water, mix one-half pound of tobacco, one-half pound of sulphur, one-quarter peck of unslaked lime. Syringe the trees well with this mixture, and it will effectually destroy blight.

Fruit Trees—to preserve.—Fruit trees can be pruned at any time, provided only small limbs or twigs have to be cut. The rule should be to so prune the trees that no large limbs would have to be cut. Cuts made in June will heal sooner than at any other time, but it requires more care at that time, as the bark peels so easily.

Fruit Pests—to drive away.—At a time when fruit trees are blossoming, and when the sparrows and bull-finches have commenced their annual raids upon them, the French have a way of driving away these diminutive plagues. This consists of lime-washing the trees. When thus whitened, the birds disappear, and there is no further occasion to dread their attacks.

Fuel—economy in using.—The best of all means of saving fuel is the following: Cut a piece of sheet-iron one eighth of an inch thick, of a shape and size to reach within one inch of each side of the grate bottom, and to project one and a half inches in the front. Lay this over the bottom grating. In making the fire, half fill the grate with coals; then put some shavings or paper, and over this some sticks or bits of charcoal. On the top lay a few of yesterday's cinders, and finally some pieces of coal, not shoveled on, but carefully laid by hand. Many servants will ridicule thus lighting a fire "at the top," and will tell you the fire will not "catch" downwards through the coal. But try it, and you will find that this plan not only saves an incredible quantity of coal, but that it saves the housemaid trouble, and the room is far better warmed. The fire is to be replenished at the bottom, by putting pieces on the ledge and pushing them in, also wherever an opening occurs among the live coals, but never on the top. The shovel and poker must be discarded, and only tongs used.

Fungi—to preserve.—Take two ounces of sulphate of copper, or blue vitriol, and reduce it to powder, and pour upon it a pint of boiling water, and when cold, add half a pint of spirits of wine; cork it

well, and call it "the pickle." To eight pints of water add one pint and a half of spirits of wine, and call it "the liquor." Be provided with a number of wide-mouthed bottles of different sizes, all well fitted with corks. The fungi should be left on the table as long as possible, to allow the moisture to evaporate; they should then be placed in the pickle for three hours, or longer if necessary; then place them in the bottles intended for their reception, and fill with the liquor. They should then be well corked and sealed, and arranged in order with their names in front of the bottles.

Furniture—to remove finger marks from.—Sweet oil will remove finger marks from varnished furniture, and kerosene from oiled furniture. Patient rubbing with chloroform will remove paint from black silk or any other goods, and will not hurt the most delicate color or fabric.

Furniture—to clean.—An old cabinet maker says the best preparation for cleaning picture frames and restoring furniture, especially that somewhat marred or scratched, is a mixture of three parts linseed oil and one part spirits of turpentine. It not only covers the disfigured surface, but restores wood to its natural color, and leaves a luster upon its surface. Put on with a woolen cloth, and when dry, rub with woolen.

Furniture—to remove bruises from.—Wet the part in warm water; double a piece of brown paper five or six times, soak in warm water, and lay it on the place; apply on that a warm, but not hot, flat-iron till the moisture is evaporated. If the bruise be not gone, repeat the process. After two or three applications the dent will be raised to the surface. If the bruise be small, merely soak it with warm water, and hold a red-hot iron near the surface, keeping the surface continually wet—the bruise will soon disappear.

Furniture (Carved)—to clean.—The best duster with which to clean carved furniture is a new paint brush; it will remove all the dust with it.

Furniture—to remove marks from.—To take marks off varnished furniture, wet a sponge in common alcohol camphor, and apply it freely to the furniture. It has nearly, if not quite, the same effect that varnish has, and is much cheaper.

Furniture—to remove white stains from.—Have ready three pieces of woolen cloth, with one well dipped in lamp oil (or if that is not convenient, linseed oil,) rub the spot briskly, wet the second with alcohol and apply to oily surface, rubbing quickly, as too much alcohol will destroy the varnish, and finally polish with the third cloth, moistened with oil or furniture polish.

Furniture Polish.—For a polish to clean up and brighten old furniture, pianos, etc., dissolve four ounces orange shellac in one quart of ninety-five per cent. alcohol; to this add one quart of linseed oil, and one pint turpentine; when mixed add four ounces of sulphuric ether, and four ounces of aqua ammonia; mix thoroughly and

well before using. Apply with a cloth or sponge, and rub the surface to which it is applied until the polish appears.

Furs—to clean—For dark furs: warm a quantity of new bran in a pan, taking care that it does not burn, to prevent which it must be briskly stirred. When well warmed, rub it thoroughly into the fur with the hand. Repeat this two or three times, then shake the fur, and give it another sharp brushing until free from dust. For white furs: lay them on a table, and rub well with bran made moist with warm water; rub until quite dry, and afterward with dry bran. The wet bran should be put on with flannel, then dry with book muslin. Light furs, in addition to the above, should be well rubbed with magnesia or a piece of book muslin, after the bran process, against the way of the fur. Soiled white fur can be nicely cleaned by rubbing it thoroughly in white flour. It should then be hung out of doors for about thirty minutes. Repeat the process several times, and the fur will be equal to new.

Furs—to dye.—Any dye that will color wool will also color furs. In buying furs, examine the density and length of the down next the skin; this can easily be done by blowing briskly against the set of the fur; if it is very close and dense, it is all right, but if it opens easily and exposes much of the skin, reject it.

Furs—to preserve.—Any of the following recipes may be used: 1. Lay up along with the furs to be preserved a tallow candle.

2. Take out the furs from the drawer, etc., frequently, beat them well, expose them to the air, and scent the box where they are kept with spirits of turpentine, camphor, Russia leather, or cedar wood.

3. Pepper them well before putting them away.

4. Wash them over with a very weak solution of corrosive sublimate. If this solution leave a white powder on the fur when dry, it is too strong; ten grains to the pint will be enough.

Furs—to revive.—Thoroughly sprinkle every part with hot flour and sand, and brush well with a hard brush. Then beat with a cane; comb it smooth with a wet comb, and press it carefully with a warm iron. For ermine use plaster of Paris instead of flour and sand, and treat in the same way.

Galls—from saddle or harness—to heal.—White lead and linseed oil, mixed as for paint, is unrivaled for healing saddle, harness, or collar galls and bruises. Try it, applying with a brush. It soon forms an air-tight coating and soothes the pain, powerfully assisting nature.

Game—to improve the flavor of.—Game of any kind which has been kept too long to be pleasant, which is frequently the case with grouse, may be very much improved by being placed for a night in milk, so as to soak thoroughly, after they have been picked, drawn, and washed clean in warm water. The game will cook a great deal better for the soaking, and the high flavor be much diminished.

Game—to remove fishy taste from.—Pare a fresh lemon very carefully without breaking the thin white inside skin; put inside a

wild duck and keep it there forty-eight hours, and all the fishy taste so disagreeable in wild fowl will be removed. Every twelve hours remove the lemon and replace with a fresh one. A lemon thus prepared will absorb unpleasant flavors from all meats and game.

Gapes in Chickens—to remove.—Camphor pills will cure a chicken of the gapes. No medicine can reach them unless it does so by vapor. An hour after the chicken has swallowed the pill it smells of camphor. Camphor is a very strong vermifuge, and the worms die.

Gapes in Fowls—to cure.—The parasite that causes gapes in fowl is of a red color and about three-quarters of an inch long. The remedies are numerous, but chiefly consist in removing the worms. One way is to moisten a feather from which all but the tip of the web has been stripped, with, oil, salt water, or a weak solution of carbolic acid, introduce it into the windpipe, twist it around once or twice, and then withdraw it. A teaspoonful of sulphur mixed with a quart of corn meal and water, and fed to the fowls morning and evening, is also a good remedy.

Garden (Hanging)—to make.—A hanging garden of sponge is one of the latest novelties in gardening. Take a white sponge of large size, and sow it full of rice, oats, or wheat. Then place it for a week or ten days in a shallow dish; and, as the sponge will absorb the moisture, the seeds will begin to sprout before many days. When this has fairly taken place, the sponge may be suspended by means of cords from a hook in top of the window, where a little sun will enter. It will thus become a living mass of green, requiring a little occasional moisture.

Gardeners—hints to.—The handles of pruning knives, and all other impliments liable to be lost, should be painted of a bright red. The handles of knives and other small tools are usually of a color so near that of the soil, or that of the branches of trees and vines, that it is not easy to find them, if misplaced.

Gargling Oil (Merchants').—Take two and a half gallons linseed oil, two and a half gallons spirits of turpentine, one gallon western petroleum, eight ounces liquor potass, one ounce sap green, mix all together, and it is ready for use.

Gargle—for sore throat.—1. A large tablespoonful of salt to half a tumbler of water, used as a gargle for sore throat just before meal time, is an excellent remedy for such complaint. A little red pepper should be added if the salt water does not prove successful. Red pepper, honey or sugar, and sharp vinegar, simmered together, and then tempered with water so as not to be too strong, is a good remedy easily obtained.

2. For sore throat, three drops of carbolic acid in a tablespoonful of water, used freely as a gargle, is a simple remedy one can keep in the house, and saves many a doctor's bill.

Garget in Cows—cure for.—It is said that eight drops of tincture of aconite dropped on a piece of bread and mixed with the food at

night, and next morning four drops more given in the same manner, will generally complete the cure of garget in cows.

Garments (White Knitted) to clean.—Take those not needing washing, being only slightly soiled, place them in a pillow-case, one at a time, sprinkle flour through it, and shake well, until it looks as bright as new. Borax is excellent to wash flannels with, dissolved in lukewarm water.

Gas-meter—to prevent from freezing.—Half a pint of good glycerine is said to prevent the freezing of one gallon of water, though at least double the proportion is preferable in the country, whatever the temperature in the winter may happen to be.

Geese—how to select.—In old birds the bills and feet are red, in young ones they are yellow. When fresh killed, the feet are pliable; when long kept, they become quite stiff. It is said that geese will thrive better, and their flesh be more delicately flavored if fed upon raw potatoes, than upon any other substance.

Gems.—One egg well beaten, one cup sweet milk, a little salt, and sufficient Graham flour to form a rather stiff batter, will make excellent gems. The gem-pans must be heated well, greased thoroughly, then filled even full with the batter, and put into a very hot oven to bake quickly.

Gems (Corn).—One scant pint of meal, two tablespoonfuls of sugar, a teaspoonful of salt, and a generous pint of boiling milk. Stir thoroughly and let stand until cool, then stir in three beaten eggs, and bake in buttered gem-pans.

Gems (Graham).—1. Get fine Graham flour which you know to be made of the whole wheat, with the skin cut fine instead of being in large flakes. Into a dish of pure, cold, fresh water, say one quart, stir this flour, sifting in with one hand, and stirring with a spoon in the other, until it is a little too thick to settle flat when you stop stirring. Have your French roll-pans hot, fill them with the batter, put them at once into a hot oven and bake them on the top first. This prevents the escape of the air, by the expansion of which they are made light. After ten or fifteen minutes place on the bottom of the oven and bake as much longer, or till they are done, when they will readily loosen from the pan. Serve warm or cold.

2. One pint sweet milk, stir in Graham flour until the batter is a little thicker than for griddle cakes; add salt, one teaspoonful of sugar, and one egg well beaten. Cast-iron gem-pans are best. Grease and make very hot before the batter is put in; bake immediately, in a hot oven.

3. To one pint of sour milk take one egg, one spoonful of sugar, well beaten, and one teaspoonful of soda, and good fresh Graham flour enough to make a stiff batter. To be baked in iron gem-pans with a quick, hot fire. They will be delicious, light, puffy, and tender.

Gentian—medical uses of.—Gentian is an excellent tonic and stomachic; but when given in large doses, it acts as an aperient. It

is used internally in all cases of general debility, and, when combined with bark, is used in intermittent fevers. It has also been employed in indigestion, and it is sometimes used, combined with volatile salt, in that disease; but at other times alone, in the form of infusion. After diarrhœa it proves a useful tonic. Used externally its infusion is sometimes applied to foul ulcers. Dose: Of the infusion, one and a half to two ounces; of the tincture, one to four drams; or the extract, from ten to thirty grains.

Geraniums (Scarlet)—to preserve the old plants through the winter.—Take them out of the borders in autumn, before they have received any injury from frost, and let this be done on a dry day. Shake off all the earth from their roots, and suspend them, with their heads downward, in a cellar or dark room, where they will be free from frost. The leaves and shoots will become yellow and sickly; but when potted about the end of May, and exposed to a gentle heat, they will recover and vegetate luxuriantly. The old plants, stripped of their leaves, may also be packed closely in sand; and in this way, if kept free from frost, they will shoot out from the roots, and may be repotted in the spring.

German Paste—useful food for singing-birds.—Take one pint of pea-flour, in which rub a new-laid egg; then add two ounces of fresh lard and three ounces of honey or treacle; continue to rub this well, so as to prevent its being in large lumps; when got to a fine powder, put it into a clean earthen pipkin, and place it over a slow and clear fire, until warmed through, stirring it all the while to prevent its burning. When sufficiently hot take it off and pass it through a fine wire sieve; then add about two ounces of maw-seed, and if hempseed is thought essential, give the small Russian whole, in preference to the common sort bruised, as it only tends to bring on the husk or dry cough. Birds will eat it whole, and it will do them equal good, and prevent nasty and troublesome complaints, which oftentimes stop them when in full song, until they bring up the small particles of the hulls of the bruised hempseed.

Gherkins.—Take small cucumbers (not young), steep for a week in very strong brine; it is then poured off, heated to the boiling point, and again poured on the fruit. The next day the gherkins are drained on a sieve, wiped dry, put into bottles or jars, with some spice, ginger, pepper, or cayenne, and at once covered with strong pickling vinegar.

Gilt Cornices—to clean.—Wash them well with warm milk, and polish them with a soft wash-leather.

Gilding China and Glass.—Powdered gold is mixed with borax and gum-water, and the solution applied with a camel's-hair pencil. Heat is then applied by a stove until the borax fuses, when the gold is fixed and afterward burnished.

Gilding—to clean.—Remove all dust with a soft brush; then wash the gilding lightly and rapidly with warm water in which an onion has been boiled. Dry it by rubbing with soft cloths.

Gilt Frames—to clean.—When the gilt frames of pictures or looking-glasses, or the moldings of rooms, have specks of dirt upon them from flies or other causes, they may be cleaned with white of egg, laid on with a camel's-hair pencil.

Gilt Frames—to brighten.—Take sufficient flour of sulphur to give a golden tinge to about one and one-half-pints of water, and in this boil four or five bruised onions, or garlic, which will answer the same purpose. Strain off the liquid, and with it, when cold, wash with a soft brush any gilding which requires restoring, and when dry it will come out as bright as new work.

Gilt Frames—reviver for.—White of eggs, two ounces; chloride of potash or soda, one ounce; mix well; blow off the dust from the frames; then go over them with a soft brush dipped in the mixture, and they will appear equal to new.

Gilding Liquid.—Take of fine gold, five ounces (troy); nitro-muriatic acid, fifty-two ounces; dissolve by heat, and continue the heat until red or yellow vapors are evolved; decant the liquid into a proper vessel; add of distilled water, four gallons; pure bicarbonate of potash, twenty pounds; boil for two hours.

Gilding—without a battery.—Clean the silver or other article to be gilded with a brush and a little ammonia water, until it is evenly bright and shows no tarnish. Take a small piece of gold and dissolve it in about four times its volume of metallic mercury, which will be accomplished in a few minutes, forming an amalgam. Put a little of the amalgam on a piece of dry cloth, rub it on the article to be gilded. Then place on a stone in a furnace, and heat to the beginning of redness. After cooling, it must be cleaned with a brush and a little cream of tartar, and a beautiful and permanent gilding will be found.

Gilding on Wood.—To gild in oil, the wood after being properly prepared is covered with a coat of gold size, made of drying linseed oil mixed with yellow ochre; when this has become so dry as to adhere to the fingers without soiling them, the gold leaf is laid on with great care and dexterity and pressed down with cotton wool; places that have been missed are covered with small pieces of gold leaf, and when the whole is dry, the ragged bits are rubbed off with the cotton. This is by far the easiest mode of gilding; any other metallic leaves may be applied in a similar manner. Pale leaf gold has a greenish yellow color, and is an alloy of gold and silver. Dutch gold leaf is only copper leaf colored with the fumes of zinc; being much cheaper than true gold leaf, it is very useful when large quantities of gilding are required in places where it can be defended from the weather, as it changes color if exposed to moisture, and it should be covered with varnish. Silver leaf is prepared every way the same as gold leaf; but when applied should be kept well covered with varnish, otherwise it is liable to tarnish; a transparent yellow varnish will give it the appearance of gold. Whenever gold is fixed by means of linseed oil, it will bear washing off, which burnished gold will not.

Ginger Snaps.—One cup of lard, one cup of molasses, one cup of

sugar, one teaspoonful of ginger, one teaspoonful of soda dissolved in a little water. Boil the sugar, molasses and lard five minutes; let it cool, then add the other ingredients, and flour to make stiff; bake in a quick oven and keep in a dry, open place.

Glass—how to cut.—It is not generally known that glass may be cut, under water, with a strong pair of scissors. If a round or oval be required, take a piece of common window glass, draw the shape upon it in a black line; sink it with your left hand under water as deep as you can without interfering with the view of the line, and with your right use the scissors to cut away what is not required.

Another way is to dip a worsted thread in spirits of turpentine, and tie it close round the glass where it is intended to be cut; then set fire to the thread, and, while it is burning, plunge the glass into cold water, or well wet the thread with it. The glass will break easily in the direction of the thread.

Glass and China—to drill.—To drill china use a copper drill and emery, moistened with spirits of turpentine. To drill glass, use a steel drill tempered as hard as possible and camphor and water as a lubricant. Moisten the tool with dilute sulphuric acid. This last is better than turpentine.

Glasses—hints upon using.—Persons finding their eyes becoming dry and itching on reading as well as those who find it necessary to place an object nearer than fourteen inches from their face to read, need spectacles. Persons under forty years of age should not wear glasses until the accommodating power of the eyes has been suspended and the exact state of refraction determined by a competent ophthalmic surgeon. The spectacle glasses sold by peddlers and by jewelers generally are hurtful to the eyes of those who read much, as the lenses are made of inferior sheet glass and are not symmetrically ground. No matter how perfectly the lenses may be made, unless they are mounted in a suitable frame and properly placed before the eye, discomfort will arise from their prolonged use.

There are three systems of grading spectacle lenses, the English, the metric and the Prussian. Those made to supply the demands of the trade in this country are carelessly made, and are poor imitations of either the English or the metrical system. The metrical scale has no English equivalent, is not graded by any uniform rule of dividing the inter-focal spaces, and is therefore unsuited to the exacting demands of science.

Persons holding objects too near the face endanger the safety of their eyes, and incur the risk of becoming near-sighted.

The near-sighted eye is an unsound eye, and should be fully corrected with a glass, notwithstanding the fact it may need no aid for reading. The proper time to begin wearing glasses is just as soon as the eyes tire on being subjected to prolonged use.

Glass (Imitation Ground).—1. Dissolve ninety grains of sandarac and twenty grains of mastic in two ounces of washed ether, and add, in small quantities, a sufficiency of benzine to make it dry with a suit

able grain—too little making the varnish too transparent, and excess makes it crapey. The quantity of benzine required depends upon its quality—from one-half to one and one-half ounces, or even more, but the best results are got with a medium quality. It is important to use washed ether, free from spirit.

2. To make imitation ground glass that steam will not destroy, put a piece of putty in muslin, twist the fabric tight and tie it into the shape of a pad; well clean the glass first, and then putty it all over. The putty will exude sufficiently through the muslin to render the stain opaque. Let it dry hard; and then varnish. If a pattern is required, cut it out in paper as a stencil, place it so as not to slip and proceed as above, removing the stencil when finished. If there should be any objection to the existence of the clear spaces, clear with slightly opaque varnish. In this way very neat and cheap signs may be painted on glass doors.

Glass Stoppers—to loosen.—Put one or two drops of sweet oil round the stopper, close to the mouth of the bottle; then put it a little distance from the fire. When the decanter gets warm, have a wooden instrument with a cloth wrapped tightly round it; then strike the stopper, first on one side, then on the other; by persevering a little while, you will most likely get it out. Or you may lay the bottle in warm water, so that the neck of the stopper may be under water. Let it soak for a time, then knock it with a wooden instrument as before. To remove a glass stopper, drop some glycerine in the surrounding crevice, and after an hour or two it will loosen.

Glass Tubes—to bend.—Hold the tube in the upper part of the flame of a spirit-lamp, revolving it slowly between the fingers; when red hot it may be easily bent into any desired shape. To soften large tubes a lamp with a double current of air should be used, as it gives a much stronger heat than the simple lamp.

Glass—to prevent cracking.—1. While pouring very hot water into a tumbler, or other glass vessel, never hold the tumbler in your hand, but leave it on a tray or table. It is advisable also to warm the glass before using it, and to keep a spoon in it during the time of pouring. These are the best methods to prevent the cracking of the glass.

2. Place your tumblers, chimneys, or vessels which you desire to keep from cracking in a pot filled with cold water and a little cooking salt; allow the mixture to boil well over a fire, and then cool slowly. Glass treated in this way is said not to crack, even if exposed to very sudden changes of temperature. Chimneys become very durable by this process, which may also be extended to crockery, stoneware, porcelain, etc. The process is simply one of annealing, and the slower the process, especially the cooling portion of it, the more effective will be the work.

Glass (Soluble).—Take of pure sand, fifteen parts; charcoal, one part; and purified potash, ten parts. Mix and heat in a fireproof melting-pot for five hours, or until the whole fuses uniformly. Take

out the melted mass; and, when cold, powder it and dissolve it in boiling water.

Glass—to ornament.—In making scrolls, eagles, etc., on glass, some painters put on the outlines and shades first, and then lay the gold leaf over all; another good way is to scratch the shades on to the gold leaf after it is dry, and put the colors on the back of the gold. Silver leaf may be used in the same manner as gold, but it will not wear as well. A very pretty letter may be made by incorporating silver with gold: take paper and cut any fancy design to fit the parts of the letter; stick it on the size before laying the leaf, allowing it to dry and wash off as before; then with a penknife raise the paper figure, and the exact shape or form of the figure will be found cut out of the gold letter; clean off nicely, apply more size, and lay silver leaf to cover the vacant spots; wash off when dry, and a very handsome letter will be the result. Colors may be used instead of silver, if desired, or a silver letter edged or "cut up" with gold, will look well

Glass and Porcelain Gilding.—Dissolve in linseed oil an equal weight either of copal or amber; add as much oil of turpentine as will enable you to apply the compound or size thus formed, as thin as possible, to the parts of the glass intended to be gilt. The glass is to be placed in a stove till it will almost burn the fingers when handled; at this temperature the size becomes adhesive, and a piece of gold leaf, applied in the usual way, will immediately stick. Sweep off the superfluous portions of the leaf, and when quite cold it may be burnished; taking care to interpose a piece of India paper between the gold and the burnisher.

Glass Powder.—To reduce glass to a fine powder, first heat it in a furnace to a slightly red heat; then throw it into cold water for a few minutes; dry it, and after this preparation it may readily be beaten to a fine powder.

Glass—to drill and ornament.—Glass can be easily drilled by a steel drill, hardened but not drawn, and driven at a high velocity. Holes of any size, from the sixteenth of an inch upward, can be drilled, by using spirits of turpentine as a drip; and, easier still, by using camphor with the turpentine. Do not press the glass very hard against the drill. If you require to ornament glass by turning in a lathe, use a good mill file and the turpentine and camphor drip, and you will find it an easy matter to produce any shape you choose.

Glass—grinding for signs, shades, etc.—After you have etched a name or other design upon uncolored glass, and wish to have it show off to better advantage by permitting the light to pass only through the letters, you can do so by taking a piece of flat brass sufficiently large not to dip into the letters, but pass over them when gilding upon the surface of the glass; then, with flour of emery, and keeping it wet, you can grind the whole surface, very quickly, to look like the ground glass globes often seen upon lamps, except the letter, which is eaten below the general surface.

Gloss on Linen—to produce.—Put boiling water in a vessel, and add pieces of white wax and spermaceti about the size of a half dollar, boil well together, and then remove from the fire and add starch mixed with cold water. Stir well while mixing, and put it back on the fire, boil two or three minutes, stirring well. Rub well into the clothes, and when ironing, use a common iron, and then take a damp cloth, wrung out well in hot water, and rub over the shirt and collar, and use the polisher right away, and I can really say you will have as nice a polish as any one could wish for.

Gloss on Black Silk—to remove.—When the gloss is caused by constant wear, moisten the silk with a sponge, lay a damp cloth over it, and pass a hot iron quickly over the cloth several times till it is quite dry.

Gloves (Kid)—to clean.—1. Make a thick mucilage by boiling a handful of flax-seed, add a little dissolved soap, then when the mixture cools, with a piece of white flannel wipe the gloves, previously fitted to the hand; use only enough of the cleaner to take off the dirt, without wetting through the glove.

2. A simple method of cleaning white or light-colored kid gloves, is to dip a bit of flannel in a lather made of milk and curd-soap, and gently rub the gloves till the soils disappear; a wooden mold of a hand of suitable size greatly facilitates this operation, but if you have none, you must put the glove on your own hand.

Gloves (Black Kids)—to clean.—To clean black kid gloves take a teaspoonful of salad oil, drop a few drops of ink in it, and rub it over the gloves with the tip of a feather; then let them dry in the sun.

Glue Directions.—Good glue should be of a light brown color, semi-transparent, and free from waves or cloudy lines. Glue loses much of its strength by frequent melting; therefore, glue which is newly made is preferable to that which has been re-boiled. The hotter the glue the better the joint. In all large and long joints it should be applied immediately after boiling. Employ pressure until it is set or hardened.

Glue (Bank-note).—Dissolve one pound of fine glue or gelatine in water; evaporate it till most of the water is expelled; add half a pound of brown sugar, and pour it into molds.

Glue (Fire and Waterproof).—Mix a handful of quick-lime with four ounces of linseed oil; thoroughly lixiviate the mixture; boil it to a good thickness, and spread it in thin plates in the shade; it will become very hard, but can be dissolved over a fire, like common glue, and is then fit for use.

Glue (Family).—Crack the glue and put it in a bottle, add common whisky, shake up, cork tight, and in three or four days it can be used. It requires no heating, will keep for almost any length of time, and is at all times ready to use, except in the coldest of weather, when it will require warming. It must be kept tight, so that the whisky will not evaporate. The usual corks or stoppers should not be used. It

will become clogged. A tin stopper, covering the bottles, but fitting as closely as possible, must be used.

Glue—for inlaying or veneering.—Select the best light brown glue, free from clouds or streaks. Dissolve this in water, and to every pint add half a gill of the best vinegar and half an ounce of isinglass.

Glue—for labelling on metals.—Boiling water, one quart; pulverized borax, two ounces; gum shellac, four ounces. Boil till dissolved. Use for attaching labels to metals, or it will do to write inscriptions with, and dust or dab on a little bronze powder over it, varnishing over the bronze.

Glue (Liquid).—1. In a wide-mouthed bottle dissolve eight ounces of best glue in half pint of water, by setting it in a vessel of water and heating it till dissolved; then add slowly, constantly stirring, two and a half ounces of strong aquafortis (nitric acid). Keep it well corked, and it will be ready for use. It is a handy and valuable composition, as it does not gelatinize, nor undergo putrefaction and fermentation, and become offensive, and is always ready for use.

2. Dissolve one part of powdered alum in a hundred and twenty parts of water; add one hundred and twenty parts of glue, ten of acetic acid, and forty of alcohol, and digest. Prepared glue is made by dissolving common glue in warm water, and then adding acetic acid (strong vinegar) to keep it. Dissolve one pound of best glue in one and a half pints of water, and add one pint of vinegar. It is then ready for use.

3. To one ounce of borax in a pint of boiling water, add two ounces of shellac, and boil till the shellac is dissolved.

4. A useful glue for fastening papers together only by being wetted by the tongue, is made as follows: Dissolve one pound of glue or gelatine in water, add half a pound of brown sugar, and boil them together. Make into cakes by pouring into shapes. It becomes solid when cold.

Glue—to manufacture.—This article is usually made from the parings and waste pieces of hides and skins, the refuse of tanneries, the tendons and other offal of slaughter houses. They ought to be obtained and kept in the dry state, to prevent decomposition. For use, they are first steeped for fourteen or fifteen days in milk of lime, and then drained and dried; this constitutes the cleaning or the preparation. Before conversion into glue they are usually steeped in weak milk of lime, well worked in water, and exposed to the air for twenty-four hours. They are then placed in a copper boiler two-thirds filled with water and furnished with a perforated false bottom, to prevent them from burning, and as much is piled on as will fill the vessel and rest on the top of it. Heat is next applied, and gentle boiling continued until the liquor on cooling becomes a gelatinous mass. The clear portion is then run off into another vessel, where it is kept hot by a water bath, and allowed to repose for some hours to deposit, when it is run into the congealing boxes and placed in a cool situation. The next morning the cold gelatinous mass is turned

out upon boards wetted with water, and are cut horizontally in thin cakes with a stretched piece of brass wire, and into smaller cakes with a moistened flat knife. These cakes are placed upon nettings to dry, after which they are dipped one by one into hot water and slightly rubbed with a brush wetted with boiling water, to give them a gloss; they are lastly stove-dried for sale. During this time the undissolved skins, etc., left in the copper is treated with water and the whole operation is repeated again and again, as long as any gelatinous matter is extracted. The first runnings produce the finest and best glue. The refuse matter from the tanners and leather dressers yields on the average, when dried, fifty per cent. of its weight in glue.

Glue (Marine).—1. India rubber, one part; coal tar, twelve parts; heat gently; mix, and add twenty parts of powdered shellac; pour out to cool; when used, heat to about two hundred and fifty degrees.

2. Glue, twelve parts; water sufficient to dissolve; add yellow resin, three parts; melt; then add turpentine, four parts; mix thoroughly together.

Glue—to resist moisture.—Glue, five parts; resin, four parts; red ochre, two parts; mix with smallest possible quantity of water.

Glue (Parchment).—Parchment shavings, one pound; water, six quarts. Boil till dissolved, strain and evaporate to right consistency.

Glue (Portable)—for draughtsmen.—Glue, five ounces; sugar, two ounces; water, eight ounces; melt in a water bath; cast it in molds. For use dissolve in warm water.

Glue—to prevent cracking.—To prevent glue from cracking when dry, add about one tablespoonful of glycerine to a pint of solution while it is hot.

Glue (Waterproof).—1. Boil one pound of common glue in two quarts of skimmed milk. This withstands the action of the weather.

2. Melt common glue with the smallest possible quantity of water; add, by degrees, linseed oil, rendered drying by boiling with litharge. While the oil is being added, the ingredients must be well stirred, to incorporate them thoroughly.

Glycerine Preparation.—New rum, one quart; concentrated spirits of ammonia, fifteen drops; glycerine oil, one ounce; lac sulphur, five and one-half drams; sugar of lead, five and one-half drams; put the liquor into a bottle; add the ammonia, then the other components. Shake the compound occasionally for four or five days.

Gold Articles—to restore color.—Tarnished gold colored articles may be restored by the following method: Dissolve one ounce of bicarbonate of soda, one-half an ounce of chloride of lime, and one-half an ounce of common salt in about four ounces of boiling water. Take a clean brush, and wash the article with the hot solution for a few seconds and rinse immediately in two clean waters. Dry in warm sawdust, and finally rub over with tissue paper.

Gold—artificial.—This is a new metallic alloy which is now very extensively used in France as a substitute for gold. Pure copper,

one hundred parts; zinc, or, preferably, tin, seventeen parts; magnesia, six parts; sal-ammoniac, three-sixths parts; quick-lime, one-eighth part; tartar of commerce, nine parts; are mixed as follows: The copper is melted first, and the magnesia, sal-ammoniac, lime and tartar are then added separately, and by degrees, in the form of powder; he whole is now briskly stirred for about half an hour, so as to mix horoughly; and then the zinc is added in small grains by throwing it on the surface, and stirring till it is entirely fused; the crucible is then covered, and the fusion maintained for about thirty-five minutes. The surface is then skimmed, and the alloy is ready for casting. It has a fine grain, is malleable, and takes a splendid polish. It does not corrode readily, and for many purposes is an excellent substitute for gold. When tarnished, its brilliancy can be restored by a little acidulated water. If tin be employed instead of zinc, the alloy will be more brilliant.

Gold-fish—hints on.—Where gold-fish are kept in vessels in rooms, they should be in spring water. The water will require to be changed, according to the size of the vessel or the number of fish kept therein; but it is not well to change the water too often. In a vessel that will hold a common sized pail of water, two fish may be kept by changing the water once a fortnight; and so on in proportion. If any food is supplied them, it should be a few crumbs of bread dropped into the water once or twice a week.

Gold (Green)—to make.—Melt together nineteen grains of pure gold and five grains pure silver. The metal thus prepared has a beautiful green shade.

Gold (Imitation)—to make.—The following recipes for metals resembling gold are said to produce a metal which will so nearly approximate the genuine as almost to defy detection, without a resort to thorough tests: Fuse, together with saltpetre, sal-ammoniac, and powdered charcoal, four parts platinum, two and one-half parts pure copper, one part pure zinc, two parts block tin, and one and one-half parts pure lead. Another good recipe calls for two parts platinum, one part silver, and three parts copper.

Gold—to clean.—Dissolve a little sal-ammoniac in urine; boil your soiled gold therein, and it will become clean and brilliant.

Gold Lacquer.—Gold lacquer, closely resembling the real Chinese article, is made by first melting to a perfectly fluid mixture two parts copal and one part shellac. To this add two parts good boiled oil. Remove the vessel from the fire, and gradually mix in ten parts oil of turpentine. To give color, add a solution of gum guttæ in turpentine for yellow, or of dragon's blood for red; a sufficient quantity of coloring material being used to give the desired shade.

Gold Plating Solution—to make and apply.—Dissolve one-half ounce of gold amalgam in one ounce of nitro-muriatic acid. Add two ounces of alcohol, and then, having brightened the article in the usual way, apply the solution with a soft brush. Rinse and dry in sawdust, or with tissue-paper, and polish up with chamois-skin.

Gold—to refine.—If you desire to refine gold from the baser metals, swedge or roll it out very thin, then cut into narrow strips and curl up so as to prevent its lying flatly. Drop the pieces thus prepared into a vessel containing good nitric acid, in the proportion, of acid, two ounces; and pure rain-water, one-half ounce. Suffer to remain until thoroughly dissolved, which will be the case in from one-half an hour to one hour. Then pour off the liquid carefully, and you will find the gold, in the form of yellow powder, lying at the bottom of the vessel. Wash this with pure water till it ceases to have an acid taste, after which you may melt and cast into any form you choose. Gold treated in this way may be relied on as perfectly pure. In melting gold use none other than a charcoal fire, and during the process sprinkle saltpetre and potash into the crucible occasionally. Do not attempt to melt with stone coal, as it renders the metal brittle and otherwise imperfect.

Gonorrhœa—positive cure for.—Liquor of potass, one-half ounce; bitter apple, one-half ounce; spirits of sweet nitre, one-half ounce; balsam of copaiba, one-half ounce; best gum, one-quarter ounce. To use, mix with peppermint water; take one-half teaspoonful three times per day. Cure certain in nine days.

Goose (Roast).—Boil and mash some potatoes; fill the goose with them. When half roasted, take out the potatoes and have ready a stuffing of sage, bread-crumbs, parboiled onions; fill the goose and finish roasting. This is a great improvement on the old mode, as it draws out the fat, and makes the fowl very delicate.

Gout Remedy.—Half an ounce of nitre (saltpetre), half an ounce of sulphur, half an ounce of flour of mustard, half an ounce of Turkey rhubarb, a quarter of an ounce of powdered guaicum. Mix, and take a tablespoonful every other night for three nights, and omit three nights, in a wineglassful of cold water, water which has been previously well boiled.

Gout (Chronic)—to cure.—Take hot vinegar, and put into it all the table salt which it will dissolve, and bathe the parts affected with a soft piece of flannel. Rub in with the hand and dry the foot, etc., by the fire. Repeat this operation four times in twenty-four hours, fifteen minutes each time, for four days; then twice a day for the same period; then once, and follow this rule whenever the symptoms show themselves at any future time.

Gout Tincture.—Veratrum viride (swamp hellebore), half an ounce; opium, one-quarter ounce; wine, half a pint. Let them stand for several days. Dose, fifteen to thirty drops, according to the robustness of the patient, at intervals of two to four hours.

Grafting Wax—to make.—Common grafting wax is made by taking one part of tallow, three of beeswax and four of resin, and melting them together over a slow fire. Melt the resin first, and put in the other ingredients after, stirring well together.

Graham Wafers—for the sick.—One cup of Graham flour, one and one-third cups of boiling water, and one-half teaspoonful of salt,

Put the salt into the boiling water, pour the water gradually on the Graham, beat thoroughly, and set away to cool. When cool, spread on sheets or pans as thin as the blade of a knife. Bake in a moderate oven about twelve minutes. Sick people can eat this when they can eat no other bread.

Granite—to imitate.—For the ground color, stain your white lead to a light lead color with lampblack and a little rose pink. Throw on black spots, with a graniting machine, a pale red, and fill up with white before the ground is dry.

Grape Ambrosia.—Make a batter as for gems. Line a pudding dish with the batter half an inch deep. Put on this a layer of grapes, with sugar to sweeten, (the less the better) and a slight sprinkling of flour, then another layer of grapes, not making the dish more than half full. Cover the whole with batter and bake one hour, on the top first, then on the bottom. Be careful not to let the juice run away. Serve warm or cold.

Grapes—to keep.—If grapes mature perfectly they may be kept for a considerable length of time if cut without bruising, and hung up in a dry, cool, and rather dark cellar. The stem should be covered, when cut, with wax, and hung with the stem up. Immature grapes will not keep in this way or any other.

Grapes—to preserve all winter.—By the following process a Frenchman, M. Charmeaux, preserves grapes so that they are as fresh in the spring and early summer as when picked from the vine:

"The grapes are allowed to remain on the vines as long as the weather permits. They are then cut in such a manner that a piece of the vine remains on both sides of the stem of each bunch. It is best to leave two buds or nodes above, and three or four below. The upper end is carefully sealed with wax, the lower is inserted in a suitably sized vial filled with water, to which, in order to prevent decay, a quantity of charcoal powder is added. The neck of the vial is then closed around the bit of vine by means of wax. The grapes thus prepared are either hung up, or laid on straw or cotton, in a cool, not freezing room, where they keep with no other care than removing such berries as will from time to time occasionally decay."

Grapes—to preserve.—Take a cask or barrel which will hold water, and put into it, first, a layer of bran, dried in an oven, or of ashes, well dried and sifted; upon this place a layer of grapes well cleaned, and gathered in the afternoon of a dry day, before they are perfectly ripe; proceed thus with alternate layers of bran or ashes and grapes, till the barrel is full, taking care that the grapes do not touch each other, and let the last layer be of bran or ashes; then close the barrel, so that the air may not penetrate, which is an essential point. Grapes thus packed will keep for nine or even twelve months. To restore them to freshness, cut the end of the stock of each bunch of grapes, and put it into red wine, as you would flowers into water. White grapes should be put into white wine.

Grapes (Wax)—to make.—To make wax grapes, take annealed

wire that is stiff enough to support it—I don't remember the number—wind a little cotton on one end, double it over to prevent its pulling off; then, for what is called Black Hamburg, color common resin with lamp-black and melt gradually, then dip the cotton end in the resin, then in cold water, and press it tight with the fingers; when it is cold continue to dip it in the resin, then in the water to cool, until it is as large as wanted, being careful to turn it when just out of the resin to get the required shape and size; lastly, dip in hot wax previously colored with blue and red paint, and hold grape in cup so it will drain. Each kind has its color of paint.

Grapevines—winter care of.—All varieties of grapevines not thoroughly hardy should receive some winter protection to secure best results, and it is claimed by many that it pays to give protection to the hardiest kinds even. Some growers attribute their success with Delaware, Duchess, Roger's Hybrids, etc., simply to covering, while their neighbors signally fail with the same varieties. As the treatment in both cases is exactly alike, the different results can only be attributed to the protection given in one case and its omission in the other: The process is simple, and depends on the extent of the operation. After the vines have shed their leaves and matured their wood, they should be pruned, and, on the approach of cold weather, loosened from the trellis, bent down on the ground, and held there with stakes, rails, or something similar. This is sometimes found sufficient, especially when snow lies till late in the spring. If not satisfied with this dependence, a slight covering with leaves, straw, cornstalks, limbs of evergreens, will prove effectual. If danger is to be apprehended from the depredations of mice, which in some sections are very troublesome, a slight covering of earth on the top is all that is necessary. It should be remembered that it is the young wood of the present season's growth that is to be protected—this contains the buds in which are the embryo fruit cluster for next year's crop. Of course, similar protection would not hurt the old wood, but it is not always feasible to provide it. But the main question necessarily preceding all this, on which depends the success or entire failure of the whole operation, is the maturity and thorough ripening of the wood.

Grasses—ways to crystalize.—1. Ladies who admire beautiful bouquets of grass, will appreciate the following recipe: Take one and one-half pounds of rock alum, pour on three pints of boiling water; when quite cool, put in a wide-mouthed vessel, hang in your grasses, a few at a time. Do not let them get too heavy, or the stems will not support them. You may again heat alum and add more grasses. By adding a little coloring matter it will give a pleasing variety.

2. I make a brine by boiling one quart of common salt in two and one-half quarts of water for fifteen minutes. I tie my grasses in small bunches, and suspend as many as I can in a wide-mouthed jar. The salt will not quite all dissolve, but stir it, and pour while hot over the grass. Place in a dark room, or the cellar, where it will not be

shaken. I let it stand twenty-four hours, then gently lift the grasses out and hang them up to dry. In a few hours they will be white and glistening as the "driven snow."

Gravel.—Steep one-half pound of hops in a quart of water and give it as hot as the horse can stand it.

Gravel and Kidney Complaints—drops for.—Oil of origanum, one ounce; oil of hemlock, one-quarter ounce; oil of sassafras, one-quarter ounce; oil of anise, one-half ounce; alcohol, one pint; mix. Dose, from one-half to one teaspoonful three times a day, in sweetened water, will soon give relief when constant weakness is felt across the small of the back, as well as gravelly affections causing pain about to kidneys.

Gravel Houses—how to build.—This is the best building material in the world. It is four times cheaper than wood, six times cheaper than stone, and superior to either. Proportions for mixing: To eight barrows of slaked lime, well deluged with water, add fifteen barrows of sand; mix these to a creamy consistency, then add sixty barrows of coarse gravel, which must be worked well and completely. You can throw stones into this mixture of any shape or size, up to ten inches in diameter. Form mold for the walls of the house by fixing boards horizontally against upright standards, which must be immovably braced so that they will not yield to the immense pressure outward as the material settles; set the standards in pairs around the building where the walls are to stand, from six to eight feet apart, and so wide that the inner space shall form the thickness of the wall. Into the molds thus formed throw in the concrete material as fast as you choose, and the more promiscuously, the better. In a short time the gravel will get as hard as the solid rock.

Grease—to remove.—Aqua ammonia, two ounces, soft water, one quart; saltpeter, one teaspoonful; shaving soap in shavings, one ounce; mix together; dissolve the soap well, and any grease or dirt that cannot be removed with this preparation, nothing else need be tried for it.

Grease Spots—to remove from carpets.—Cover the spots with flour, then pin a thick paper over; repeat the process several times, each time brushing off the old flour and putting on fresh.

Grease—to remove from woolen.—Fuller's earth or tobacco-pipe clay, being put wet on an oil spot, absorbs the oil as the water evaporates, and leaves the vegetable or animal fibers of the cloth clean on being beaten or brushed out. When the spot is occasioned by tallow or wax, it is necessary to heat the part cautiously by an iron, or the fire, while the cloth is drying. In some kinds of goods, blotting-paper, bran, or raw starch may be used with advantage.

Grease Spots—to remove from cloth.—An excellent mixture to remove grease spots, from boys' and men's clothing particularly, is made of four parts of alcohol to one part of ammonia and about half as much ether as ammonia. Apply the liquid to the grease spot, and then rub diligently with a sponge and clear water. The chemistry of

the operation seems to be that the alcohol and ether dissolve the grease, and the ammonia forms a soap with which it is washed out with the water. The result is much more satisfactory than when something is used which only seems to spread the spot and make it fainter, but does not actually remove it. If oil is spiled on a carpet and you immediately scatter corn meal over it, the oil will be absorbed by it. Oil may also be removed from carpets on which you do not dare put ether or ammonia by laying thick blotting paper over it and pressing a hot flat-iron on it. Repeat the operation several times, using a clean paper each time. Machine grease can be removed from fabrics by the use of cold water and soap.

Grease—to remove from paper.—If you wish to remove grease from paper, scrape finely some pipe clay, and completely cover the spot to be cleaned. Then pass a hot iron over it for a few seconds, and with a perfectly clean piece of India rubber, rub off the clay. In most cases, one application will be sufficient, but if not, repeat it.

Grease Heel.—Lye made from wood ashes, and boil white oak bark in it till it is quite strong, both in lye and bark ooze; when it is cold, it is fit for use. Wash off the horse's legs with castile soap; when dry, apply the above lye with a swab fastened on a long stick to keep out of his reach, as the smart caused by the application might make him let fly without much warning; but it is a sure cure, only it brings off the hair. To restore the hair after the cure is effected, make and apply a salve by stewing elder bark in old bacon; then form the salve by adding a little resin, according to the amount of oil when stewed, or one-half pound resin to each pound of oil.

Green Blinds (Faded)—to restore.—Green blinds that have faded may be made to look like new by oiling over with a brushing of linseed oil.

Green Corn—to keep.—Gather the corn when in good eating state; place the corn, cob and all in a vessel and pour boiling water over it. Let it remain in the hot water from three to five minutes, then cut the corn from the cob; put a layer of corn, then a layer of salt in large stone jars. When full, weight down; keep adding layers as the corn sinks down in the jar; the salt makes a brine without water; when used, soak all night in clear, cold water.

Griddle Cakes.—Beat two eggs, add a pint (or a little more) of sour milk and a teaspoonful of salt. Then sift in sufficient flour to make proper consistency, and lastly, beat in well a rounding teaspoonful of soda.

Grindstones from Common Sand.—River sand, thirty-two pounds; shellac, ten parts; powdered glass, two parts; melt in an iron pot, and cast into molds.

Ground Glass (Imitation of)—ways to paint.—1. Grind and mix white lead in three-fourths of boiled oil and one-fourth spirits of turpentine, and to give the mixture a very drying quality, add sufficient quantities of burned white vitriol and sugar of lead. The color must be exceedingly thin, and put on the panes of glass with a large sized

paint brush in as even a manner as possible. When a number of the panes are thus painted, take a dry duster quite new, dab the ends of the bristles on the glass in quick succession, till you give it a uniform appearance. Repeat this operation till the work appears very soft, and it will then appear like ground glass. When the glass requires fresh painting, get the old coat off first by using strong pearl-ash water.

2. Spirits of salts, two ounces; oil of vitriol, two ounces; sulphate of copper, one ounce; gum arabic, one ounce; mix all well together, and dab on the glass with a brush.

Guano—test for its purity.—The weight affords the easiest test for the purity of guano. A bushel of pure Peruvian guano, according to most authorities, should weigh almost exactly seventy pounds. If heavier than seventy-three pounds, it is adulterated with clay, sand, marl, or some other impurity.

Guano—home-made.—Save all your fowl manure from sun and rain. To prepare it for use, spread a layer of dry swamp muck (the blacker it is the better) on your barn floor, and dump on it the whole of your fowl manure; beat it into a fine powder with the back of your spade; this done, add hard wood ashes and plaster of Paris, so that the compound shall be composed of the following proportions: Dried muck, four bushels; fowl manure, two bushels; ashes, one bushel; plaster, one and one-half bushels. Mix thoroughly, and spare no labor; for, in this matter, the effort expended will be well paid for. A little before planting, moisten the heap with water, or, better still, with urine; cover well over with old mats, and let it lie till wanted for use. Apply it to beans, corn, or potatoes, at the rate of a handful to a hill; and mix with the soil before dropping the seed. This will be found the best substitute for guano ever invented, and may be depended on for bringing great crops of turnips, corn, potatoes, etc.

Gum—for backing labels.—Mix pure dextrine with boiling water until it assumes the consistency of ordinary mucilage. Apply with a full bodied, evenly made camel's hair brush. The paper should not be too thin or unsized. It will dry quickly and adhere when slightly wet.

Gums (The)—an excellent paste for.—Finely powdered alum, one-eighth ounce; sulphate of quinine, ten grains. Make these ingredients into a rather thick paste, with which rub the gums occasionally.

Gums—swollen or scorbutic.—Take of infusion of roses, six ounces; borax, one ounce; honey of roses, one ounce. Mix, and use the mixture twice a day as a wash for the gums.

Gums—tincture for.—Gumboils, frequently so troublesome, and also pains in the gums, may be prevented by the occasional use of the following tincture: Six ounces of tincture of Peruvian bark, one-half ounce of sal-ammoniac. Make a mixture of these in a phial, and shake it well before using. The best mode of applying the tinture

to the gums is with a piece of soft sponge or the finger. The mouth should afterward be rinsed with warm water

Guns and Rifles—to clean.—Guns and rifles may be easily cleaned from lead by the following: If a muzzle-loader, stop up the nipple or communication hole with a little wax, or if a breach-loader insert a cork in the breach rather tightly; next pour some quicksilver into the barrel, and put another cork in the muzzle, then proceed to roll it up and down the barrel, shaking it about for a few minutes. The mercury and the lead will form an amalgam, and leave the barrel as clean and free from lead as the first day it came out of the shop. The same quicksilver can be used repeatedly by straining it through washleather; for the lead will be left behind in the leather, and the quicksilver will be again fit for use.

Habits of Neatness in Children.—A little more care in training the children to habits of neatness would reduce the size of the washing almost one-half. What need is there of washing a tablecloth for every day in the week? Put a newspaper or an oilcloth at the corner for baby's plate. If the little ones are given luncheon between meals, put big oilcloth bibs on them, covering the entire front of their aprons, and you will not have one-third as many gingham pieces in the wash. A little forethought will save a headache, backache, and cross words.

Hair Dressing.—Take two ounces of olive oil, four ounces of good bay rum, and one dram of oil of almonds. Mix and shake well. It renders the hair dark and smooth.

Hair Brushes—to clean.—As hot water and soap soon softens the hairs, and rubbing completes their destruction, use soda dissolved in cold water. Soda, having an affinity for grease, cleans the brush with very little friction. After well shaking them, stand them on the points of the handles in a shady place.

Hair (The)—to cleanse.—To one gill of warm water, add twenty drops of aqua ammonia, and with a bit of flannel or a sponge, wash the head and hair, dividing it into partings, so as to rub out the dandruff thoroughly. Then comb the head with a fine-tooth comb, and let it dry in the air. This hair wash has been tried for years, and will not only keep the head very clean if used twice a month, but preserve the color and thickness of the hair.

Hair (The)—how to care for.—The hair is the covering of the roof of "The home of thought and palace of the soul." Where baldness, which sometimes occurs in quite young persons, is hereditary, it is doubtful if anything can be done to prevent or remedy it. Avoid "restoratives" and other nostrums, and as a rule do not use pomatums or oils upon the head. The thorough use of a moderately stiff brush will greatly promote the health of the scalp and prevent the falling of the hair. The hair should be occasionally washed, and if there is much dandruff, the yolk of an egg will be most efficient in removing it. Work an egg with the fingers well into the hair, a little at a time, to bring it in contact with the scalp; then wash it out

thoroughly with water, and the hair will be left beautifully clean and soft. Avoid all shampooing liquids; those used by barbers are strong potash solutions. They call it "salts of wormwood" and "salts of tartar," and use it without knowing its real nature. It is very effective in cleaning but ruinous to the hair. If the falling of the hair is not prevented by thorough brushing, some stimulating application may be made. Cantharides is most commonly used. Half an ounce of the tincture of cantharides added to a quart of bay rum will answer better than most "hair tonics."

Hair (The)—to crimp.—Ladies who have difficulty in making their hair remain crimped will find the following of use: Let five cents' worth of gum arabic be dissolved in a very little hot water and left to stand over night in enough alcohol to make it thin; then bottle. The hair should be wet with the mixture before being crimped.

Hair (The)—to dye black.—Take sifted lime, sixteen ounces; white lead, two ounces; litharge in fine powder, one ounce. Mix well together and keep dry. When required for use, mix a little powder with water to the consistency of cream, and apply carefully with a sponge.

Hair Dye (Batchelor's).—1. To one ounce of pyro-gallic acid, dissolved in one ounce of alcohol, add one quart of soft water.

2. To one ounce nitrate of silver, dissolved in one ounce of concentrated ammonia, add four ounces of soft water. Apply each number alternately, with separate brushes, to the hair.

Hair Dye (Christadoro's).—1. To one ounce of pyro-gallic acid, dissolved in one ounce alcohol, add one quart soft water.

2. To one ounce crystalized nitrate of silver, dissolved in one ounce concentrated aqua-ammonia and one ounce soft water, add one-half ounce gum arabic and three ounces soft water. Keep covered from the light.

Hair Dye (Phalon's Instantaneous).—1. To one ounce pyro-gallic acid, and one-quarter ounce of tannia, dissolved in two ounces of alcohol, add one quart of soft water.

2. To one ounce crystallized nitrate of silver, dissolved in one ounce concentrated aqua-ammonia, add one ounce gum arabic, and fourteen ounces soft water. Keep in the dark.

Hair Dye (Harrison's).—1. To one ounce pyro-gallic acid, one ounce of tannia, dissolved in two ounces alcohol, add one quart soft water

2. To one ounce crystallized nitrate of silver, dissolved in one ounce of concentrated aqua-ammonia, add five ounces soft water and one-half ounce gum arabic.

3. One ounce hydra-sulphate of potassa, dissolved in one quart of soft water. This last ingredient is intended to produce a deep black color if the others should fail. Keep away from the light.

Hair Dye (Phalon's)—one preparation.—To one ounce crystallized nitrate of silver, dissolved in two ounces of aqua-ammonia, add five ounces soft water. This is not an instantaneous dye; but after

exposure to the light and air. A dark color is produced upon the surface to which it is applied. Remember to remove all grease, etc., from the hair before applying these dyes.

Hair (The)—ways to keep from falling out.—1. Wash the head every week in salt water and rub the skin of the head with a dry coarse towel. Then apply a dressing composed of bay rum and sweet oil, with which a drop of tincture of cantharides has been mingled. This will stimulate the skin, and keep the hair from falling out and turning gray. The dressing for the hair may be scented with cinnamon oil, or some such warming essence.

2. To stop the hair from coming out, take a bottle two-thirds full of sweet oil, filling the other third with ammonia. If the scalp be tender, use more oil and less ammonia, as the ammonia causes a smarting sensation, which makes the scalp more healthy, while the oil prevents its injuring the hair or scalp in any way. Use once a day by rubbing carefully into the roots of the hair with the hand.

3. To prevent the hair from falling out, apply once a week a wash made of one quart of boiling water, one ounce of pulverized borax, and half an ounce of powdered camphor. Rub on with a sponge or a piece of flannel.

4. Thoroughly wetting the hair once or twice a week with a weak solution of salt water will prevent it falling out.

Hair Oil (Barbers' Star).—Castor oil, six and one-half pints; alcohol, one and one-half pints; citronella, and lavender oil, each half an ounce.

Hair (Gray)—to prevent.—When the hair begins to change color, the use of the following pomade has a beneficial effect in preventing the disease extending, and has the character of even restoring the color of the hair in many instances: Lard, four ounces; spermaceti, four drams; oxide of bismuth, four drams. Melt the lard and spermaceti together, and when getting cold stir in the bismuth. To this can be added any kind of perfume, according to choice. It should be used whenever the hair requires dressing. It must not be imagined that any good effect speedily results; it is in general a long time taking place, the change being very gradual.

Hair Invigorator.—One quart bay rum, one pint alcohol, one ounce castor oil, one ounce tincture cantharides, one pint sweet oil. Bottle and label.

Hair (The)—to preserve.—Take three ounces of pulverized sage and turn a pint of cold, soft water over it; have it in a tin dish with a cover; let it steep over the fire ten or fifteen minutes; strain it off and add a teaspoonful of pulverized borax, and the same quantity of salt. Keep in a tight corked bottle, and apply with a sponge or soft cloth, by rubbing gently all over the head; then brush lightly. Use it night and morning. For everything but hereditary baldness it acts like a charm.

Hair (The)—to promote the growth of.—For strengthening and promoting the growth of the hair, use half an ounce of spirits of am-

monia, one ounce of olive oil, one dram of eau de cologne, one dram of tincture of Spanish flies; mix together, and rub on the head once a day.

Hairs (Superfluous)—to remove.—Some few hairs will frequently grow where they are not wanted, and are often difficult to get rid of. Close shaving and cutting strengthens them and increases their number; the only plan is to pull them out individually with a pair of tweezers, and afterward to dress the part two or three times a day in the following manner: Wash it first with warm soft water, but do not use soap; then apply with a piece of soft rag, immediately after the washing, a lotion of milk of roses, made according to the following directions, and rub the skin gently till it is dry with a warm soft cloth: Beat four ounces of sweet almonds in a mortar to a paste with half an ounce of white sugar; then work in, in small quantities, eight ounces of rosewater; strain the emulsion through a muslin, put the liquid into a bottle, return the residum to the mortar, pound it again, and add half an ounce of sugar and eight ounces of rosewater; then strain again, and repeat the process a third time. This will give thirty-two ounces of fluid, to which add twenty grains of bichloride of mercury dissolved in two ounces of alcohol. Shake the whole for five minutes, and the lotion will be ready for use.

Hair—to thicken.—One quart of white wine, one handful of rosemary-flowers, one-half pound of honey, one-quarter pint of oil of sweet almonds. Mix the rosemary and honey with the wine, distil them together, then add the oil of sweet almonds and shake well. When using it, pour a little into a cup, warm it, and rub it into the roots of the hair.

Hair Tonic.—One ounce of chloroform, one ounce of strong water of ammonia, one ounce of glycerine, five ounces of alcohol. The lotion to be rubbed on the head after thorough friction with the brush. It may be applied two or three times a week. If too strong, or strong enough to make the head smart, it may be diluted with water. This is the best tonic for the hair ever used.

Hair Restoratives.—1. A tea made by pouring one pint of boiling water on two tablespoonfuls of dried rosemary leaves, with a wineglassful of rum added, is excellent.

2. Four drams oxide bismuth, four drams spermaceti, four ounces pure hogs' lard. The lard and spermaceti should be melted together. When nearly cool, stir in the bismuth and perfume. Put in pots and label. Prevents the hair from turning gray; restores gray hair.

Hair Restorative (Phalon's).—To eight ounces of ninety per cent. alcohol, colored by a few drops tincture of alkanet root, add one ounce of castor oil, and perfume with a compound of bergamot, neroli, verbena, and orange.

Hair Restorative (Mrs. Allen's).—To sixteen ounces of rosewater, diluted with an equal part of salt water, add one-half ounce of sulphur and one-quarter ounce of sugar of lead. Let the compound stand five days before using.

Hair Wash—several kinds.—1. Take one ounce of borax, half an ounce of camphor; powder these ingredients very fine and dissolve them in a quart of boiling water; when cool the solution will be ready for use; dampen the hair frequently. This wash effectually cleanses, beautifies and strengthens the hair, preserves the color and prevents early baldness. The camphor will form into lumps after being dissolved, but the water will be sufficiently impregnated.

2. Take a small quantity of rosemary, strip the leaves from the stalks, and put them into a jar with nearly half a pint of cold water. place the jar near the fire, and let the contents simmer gently for an hour or two, without setting or burning. When the water is somewhat reduced, the infusion will be sufficiently strong. Then add half a pint of rum, and simmer the whole for a little while longer. When cold, strain the liquor from the leaves, and keep it in a bottle to be ready for use. Apply it to the roots of the hair with a small sponge or piece of flannel.

3. One dram of tincture of lytta, half an ounce of spirits of wine, half an ounce of spirits of rosemary. Put these into a bottle, and add half a pint of cold water.

Hair Wood—to imitate.—For the ground color, take white lead and thin with turpentine, and slightly staid it with equal quantities of Prussian blue and lampblack. For the graining color, grind in ale a mixture of Prussian blue and raw sienna; when the ground is dry, spread a transparent coat of the graining color on the surface of the work, and soften; then, with the cork, mottle by rubbing it to and fro across the work, to form the fine long grain or mottle. When this is done, soften and top grain in wavy but perpendicular directions; varnish and dry.

Halter Pulling.—A new way to prevent horses pulling at the halter, is to put a very small rope under the horse's tail, bringing the ends forward, crossing them on the back, and tying them on the breast. Put the halter strap through the ring, and tie the rope in front of the horse. When the horse pulls, he will, of course, find himself in rather an uncomfortable position, and discontinue the effort to free himself.

Hammock—how to make.—I will tell you how to make a comfortable, inexpensive hammock. Bring your old flour barrel from the cellar or storeroom, knock it to pieces, clean, and paint the staves. I like red. Procure a rope four times the length, each place where it is to be suspended, and in size—a little larger than a clothesline. Now halve the rope, double each piece in the middle, and commencing two yards or so from the end, weave it over and under each stave about three inches from the end of each one, which will bring the rope crossed between each; do both sides the same, and your hammock is complete. I like one end of the rope fastened up higher than the other. There, isn't the effect pretty? The bright red contrasts so strongly with the green leaves. At first, this may not seem

firm, but when there is any weight on it, the rope becomes "taut," as the sailors say, consequently there will be no openings.

Ham—to bake.—First put into cold water and bring it almost to a boil; then pour off the water and fill again with cold water. When scalding hot, drain off the second time. Again cover with cold water and set over the fire where it will simmer slowly till nearly done. Then take off the skin, rub in half a teacupful of sugar, cover with a layer of fine bread crumbs in which a little more sugar and some black pepper have been mixed. Bake half an hour, so that the crumbs may be nicely browned. When the ham is prepared for baking, lay a grating in the pan to raise the ham so that it may not be soaked with the fat that will run from it. Put no water into the pan.

Hams—to cure.—As soon as the hams are cut, tie them up by the hock for three days; then make a pickle thus: One ounce of saltpeter, half an ounce of salt prunella, one pound of common salt, one pound of coarse sugar, one ounce of juniper berries, and one gallon of strong beer; boil altogether, and when cold, pour it over the hams. Turn them every day for a fortnight. This quantity of pickle will be sufficient for two hams.

Ham—to cook tender.—Ham and lean of bacon, which is usually hard and tough, may be cooked so as to be perfectly tender, and without waist of fat, by not allowing the water to boil.

Ham—to cook (Aunt Sally's way).—First cut the slice, not quite one-half of an inch thick. Then trim off the outside edges very carefully and neatly. These edges she slightly scores so that they appear when cooked like a sort of fringe around each piece. When thus prepared place in the frying pan some luke-warm water in which lay the slices, allowing them to remain on the fire about three minutes. Then, throwing this water off, put in its place some hot water—just enough to cover the slices—allow it to come to a boil, then empty it into a clean bowl, leaving the slices in a pan, which fry for about four or five minutes. When done, place them upon a hot dish, and pour over them the heated water as gravy.

Hams—to keep.—A very good way of keeping hams is to wrap them in strong brown paper so that the ashes cannot come in contact with them. Then pack them in clean, hard wood ashes, in dry boxes or barrels. This will keep well cured hams quite sweet, as the ashes serve as a protection against insects. The boxes should be set in a cool, dry place.

Hams (Premium)—method of keeping, etc.—To four gallons of water, add eight pounds of coarse salt, one quarter ounce potash, two ounces saltpeter, two pounds brown sugar. Boil together, skim when cold, put on the above quantity to one hundred pounds meat; hams to remain in eight weeks; beef, three weeks. Let the hams dry several days before smoking. Meat of all kinds, salmon and other fish, lobsters, etc., may be preserved for years by a light application of pyroligneous acid applied with a brush, sealing up in cans as usual.

It imparts splendid flavor to the meat, is very cheap, and an effectual preventative against loss.

Hams—to preserve from flies.—The best way to preserve hams from flies is, as soon as they are smoked, to wrap them in two old newspapers, first with one end and again with another, and tie the ends of the paper or paste them down. Let the string to hang them up by come through the paper, being very careful that the hole shall only be large enough to let the string through. No insect can get through paper. Woolens and furs can be kept perfectly in the same way, being careful that the egg of the moth is not previously deposited.

Hands (The)—to preserve soft.—In order to preserve the hands soft and white, they should always be washed in warm water, with fine soap, and carefully dried with a moderately coarse towel, being well rubbed every time to insure a brisk circulation, than which nothing can be more effectual in procuring a transparent and soft surface. If engaged in any accidental pursuit which may hurt the color of the hands, or if they have been exposod to the sun, a little lemon-juice will restore their whiteness for the time; and lemon-soap is proper to wash them with. Almond paste is of essential service in preserving the delicacy of the hands. The following is a serviceable pomade for rubbing the hands on retiring to rest: Take two ounces of sweet almonds; beat with three drams of white wax and three drams of spermaceti; put up carefully in rose-water. Gloves should be always worn on exposure to the atmosphere, and are graceful at all times for a lady in the house, except at meals. Lemon-juice and glycerine will cleanse and soften the hands.

Hands (The)—to soften.—To whiten and soften the hands take four parts of glycerine, five parts yolk of eggs; mix thoroughly and rub on after washing the hands. Good also for abrasions of the skin.

Hands (Chapped)—remedy for.—1. One-half ounce of glycerine with same amount of alcohol. Mix, and add four ounces of rose-water. Bottle, and shake well. An excellent remedy for rough or chapped hands.

2. Keep some oat-meal on the wash-stand, and as often as the hands are washed, rub a little oat-meal over them; then rinse off, and, when dry, put on a little bit of pomade, made as follows: Take three cents' worth of white wax, three cents' worth of spermaceti, three cents' worth of powdered camphor, and olive oil enough to make it the thickness of soap; put it in a gallipot, and let it stand in an oven to melt; mix it up, and when cold it will be found very good for the hands. Gloves worn either in the day or night, will help to keep the hands white.

3. The raw winds of early spring often produce in the hands of those who are much exposed to them that roughness and cracking of the skin known as chapping. If nothing is done to prevent, and the person is obliged to have his hands frequently wet and dried, the cracks often get deep and painful. As both a precaution and cure

for chapped hands, we have used the following with benefit: Wash the hands, and face also if it is inclined to chap, with borax water, and afterward rub with an ointment made by melting mutton tallow, or suet, and then gradually adding an equal quantity of glycerine, stirring the two together until cool. For the hands this mixture can be best applied at night, using it freely and warming it by the fire, after which an old pair of gloves can be put on to keep the bed-clothes from being soiled, and also make the skin of the hands softer.

Hands (Chapped)—to cleanse.—Keep a dish of Indian meal on the toilet stand near the soap, and rub the meal freely on the hands after soaping them for washing. It will surprise you, if you have not tried it, to find how it will cleanse and soften the skin, and prevent chapping.

Hands (The)—to soften.—Before retiring, take a large pair of old gloves and spread mutton tallow inside, also all over the hands. Wear the gloves all night, and wash the hands with olive oil and white castile soap the next morning.

Hands—to remove stains from.—If you have been picking or handling any acid fruit, and have stained your hands, wash them in clear water, and wipe them lightly, and while they are yet moist strike a match and shut your hands around it so as to catch the smoke, and the stain will disappear.

Hanging Baskets.—What looks more lovely than a plant suspended from a small rustic basket in the center of the upper part of the window? It interferes with nothing, and nothing interferes with it. There's an element of beauty in that simple fact. Plants which have slender branches, which naturally hang down, are at home in this situation. The mother-of-thousands; the Wandering Jew, with its pretty marked leaves; the lobelias, and some of the trailing campanulas or bell flowers; the well named rat-tailed cactus; and the so-called ice-plants, are more at home when suspended than when grown in any other position. Some families who have hard work to buy their daily bread, may think they cannot afford to purchase a hanging-pot and its accompaniments; well, then, fill an old fruit-can with earth, bore two holes opposite near the top, then fasten a cord to it, set your slips, and suspend from a nail driven in the center of the upper casing of the window. After the lapse of a few months it would puzzle any one to tell whether your hanging-pot cost five dollars or five cents, so thickly will it be covered with vines. By all means, place hanging plants in your windows. They beautify home.

Hanging Baskets—to water.—Plants in hanging baskets are with difficulty kept moist enough when watered in the ordinary way. It has been recommended to immerse the basket in a tub of water for a few minutes, then take it out and allow it to drip before returning it to its usual place.

Hanging Basket (Imitation Coral)—to make.—Take old hoops with the covering on; bend and tie in any shape desired; tie with wrapping twine, with ends of the twine left one-fourth of an inch

long; cover the basket when formed with knots or ties about one inch apart all over the basket. Then take one-half pound of beeswax, melt it in a shallow pan, stir in enough Japanese vermilion to get the color you wish, then roll the basket in the melted wax until it is covered completely. We have made one in this way, that has hung exposed to the weather for two years, and is still good as new.

Harness Blacking.—Three ounces turpentine, two ounces white wax, to be dissolved together over a slow fire; then add one ounce of ivory-black and one dram of indigo, to be well pulverized and mixed together. When the wax and the turpentine are dissolved, add the ivory-black and the indigo, and stir till cold. Apply very thin; brush afterward, and it will give a beautiful polish. This blacking keeps the leather soft, and, properly applied, gives a good polish. It is excellent for buggy tops, harness, etc. Old harness, if hard, may be washed in warm water, and when nearly dry, grease it with neats-foot oil.

Harness—to care for.—A harness that has been on a horse's back several hours in hot or rainy weather becomes wet; if not properly cleaned the damage to the leather is irreparable. If, after being taken from the horse, it is hung up in a careless manner, traces and reins twisted into knots, and the saddle and bridle hung askew, the leather when dried retains the same shape given it when wet, and when forced into its original form damage is done the stitching and leather. The first point to be observed is to keep the leather soft and pliable. This can be done by keeping it well charged with oil and grease; water is a destroyer, but mud and the saline moisture from the animals are even more destructive. Mud in drying absorbs the grease and opens the pores of the leather, making it a prey to water, while the salty character of the perspiration from the animal injures the leather, stitchings and mountings. It therefore follows that, to preserve the harness, the straps should be washed and oiled whenever they have been moistened by sweat or soiled by mud. If the harness is thoroughly cleaned twice a year, and, when unduly exposed, treated as we have recommended, the leather will retain its softness and strength for many years.

Harness Leather—grain black for.—First stain in tallow; then take spirits of turpentine, one pint; cream of tartar, one ounce; soda, one ounce; gum shellac, one-half ounce; thick paste, reduced thin, two quarts. Mix well. This will finish twelve sides.

Harness Wounds on Horses.—The best cure for harness wounds on horses is burned leather. Rub the ashes on the sore, and a cure is soon effected.

Harvest Drink.—Mingle together five gallons of pure water, one-half gallon molasses, one quart of vinegar, and two ounces of powdered ginger. This drink is very invigorating.

Hash—to make.—Hash made of bits of roast beef or of lamb may be given a very good flavor by using raw potatoes instead of cold boiled. Chop the potatoes very fine, in the proportion of two-thirds

of these to one-third of meat. This will require a longer time to cook, of course, but it is a dish much liked by many people.

Hats—waterproof stiffening for.—Mix eighteen pounds shellac with one and one-half pounds of salt of tartar (carbonate of potash), and five and one-half gallons of water. These materials are to be put in a kettle, and made to boil gradually till the lac is dissolved, when the liquid will become as clear as water, without any scum upon the top, and if left to cool, will have a thin crust upon the surface, of whitish cast, mixed with the light impurities of the gum. When this skin is taken off, the hat body is to be dipped into the mixture in cold state, so as to absorb as much as possible of it; or it may be applied with a brush or sponge. The hat body, being thus stiffened, may stand till it becomes dry, or nearly so; and after it has been brushed, it must be immersed in very dilute sulphuric or acetic acid, in order to neutralize the potash, and cause the shellac to set. If the hats are not to be napped immediately, they may be thrown into a cistern of pure water, and taken out as wanted.

Hay Fever—relief for.—Patients suffering from this most distressing complaint will find almost immediate relief by bathing the nose and closed eyes with a lotion of spirits of camphor and warm water. The strength of the lotion will be soon learned by experience. The eyes must be carefully closed.

Hay for Hogs.—Very few are aware of the fact that hay is very beneficial to hogs; but it is true, nevertheless. Hogs need rough food as well as horses, cattle, or the human race. To prepare it you should have a cutting-box (or hay cutter), and the greener the hay the better. Cut the hay short and mix with bran, shorts, or middlings, and feed as other food. Hogs soon learn to like it, and if soaked in swill or other slop food, it is highly relished by them. In winter use for hogs the same hay you feed to your horses, and you will find that, while it saves bran, shorts, or other food, it puts on flesh as rapidly as anything that can be given them.

Head (The)—to free from dandruff.—Take a quart bottle, fill it with borax to the depth of one inch, then fill with water, and as often as you take out, put more water in, occasionally adding borax, then once in three or four weeks take a tablespoonful of this mixture to a pint of clear water, bathe the scalp and dry with a towel.

Headache—new remedy for.—A new remedy for headache has been found by Dr. Haley, an Australian physician, who says that for some years past he has found minimum doses of iodide of potassium of great service in frontal headache; that is, a heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wineglassful of water, and this quietly sipped, the whole quantity being taken in about ten minutes. In many cases, he adds, the effect of these small doses has been simply wonderful, as, for instance, a person, who a quarter of an hour ago

was feeling most miserable, and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness.

Headache and Cold Feet.—There are many who suffer from headaches and cold feet. If they would plunge their feet in cold water every morning, and use the flesh-brush every night, it would relieve them both.

Headache—several cures for.—1. Coarse brown paper soaked in vinegar and placed on the forehead is good for a sick headache. If the eyelids are gently bathed in cool water the pain in the head is generally allayed.

2. In Potosi the most violent headaches, so very common there, are cured by putting the feet in hot water.

3. A mixture of ice and salt, in proportion of one to one-half, applied to the head, frequently gives instant relief from acute headache. It should be tied up in a small linen cloth, like a pad, and held as near as possible to the seat of the pain.

4. We have known some extreme cases of headache cured in half an hour by taking a teaspoonful of finely powdered charcoal in half a tumbler of water. It is an innocent yet powerful alkali.

5. For sick-headache, take a tumbler two-thirds full of finely crushed ice, the juice of one lemon, and one teacupful of white sugar. The mixture, eaten by degrees, or all at once, will allay the feverish thirst, and quiet the disturbed, qualmish stomach, as it is not sweet enough to be nauseous.

6. Sick headache can often be greatly relieved, and sometimes entirely cured, by the application of a mustard plaster at the base of the neck. The plaster should not be kept on more than a quarter of an hour.

Headache (Billious)—cure for.—Dissolve and drink two teaspoonfuls of finely-powdered charcoal in half a tumbler of water; it will relieve in fifteen minutes. Take a seidlitz powder an hour afterward.

Headache (Nervous)—relief for.—Many persons find speedy relief for nervous headache by washing the hair thoroughly in weak soda water. I have known severe cases almost wholly cured in ten minutes by this simple remedy. A friend finds it the greatest relief in cases of "rare cold," the cold symptoms entirely leaving the eyes and nose after one thorough washing of the hair. The head should be thoroughly dried afterward, and avoid draughts of air for a little while.

Head Cheese.—Take the head, ears and tongue, and any other small pieces of young, fresh pork; have the skin taken off and boil in water, with a little salt added, until the bones are loosened from the meat; chop fine, season with salt, black pepper, cloves, alspice, sage and sweet marjoram; mix all well together; put in a round, deep pan, putting on a cover that will fit the pan and heavy weights on it. Let stand two or three days.

Head (Clean)—a preventative of contagious diseases.—A distinguished physician, who had spent much time at quarantine, said that a person whose head was thoroughly washed every day rarely took contagious diseases, but where the hair was allowed to become dirty and matted it was hardly possible to escape infection.

Head Wash.—Sage tea is one of the very best washings and dressings for hair. The hair should be carefully brushed, and braided in two firm braids, then the roots rubbed with a sponge dipped in lukewarm sage tea; after which the braids can be washed and dried with a towel. This preserves the color of the hair and keeps the scalp clean.

Health—secrets for.—First, keep warm. Second, eat regularly and slowly. Third, maintain regular bodily habits. Fourth, take early and very light suppers, or, better still, none at all. Fifth, keep a clear skin. Sixth, get plenty of sleep at night. Seventh, keep cheerful and respectable company. Eighth, keep out of debt. Ninth, don't set your mind on things you don't need. Tenth, mind your own business. Eleventh, don't set up to be a sharp of any kind. Twelfth, subdue curiosity.

Health Hints.—It is not a good habit to keep a lamp burning in the bedroom.

A good laugh is worth a hundred groans in any state of the markets.

File the top of an ingrowing toe nail very thin and place cotton under the ingrown part.

If ice is to be applied to the head of a patient, the best way is to have it broken in small pieces, and tied up in a bladder.

Never go to bed with cold feet, but first soak them in hot water, then dash on cold water, followed by thorough friction.

Common baking soda is the best of all remedies in cases of scalds and burns.

For earache fold and dip a small towel in hot water, wring and lay on the ear; then cover with two or three folds of flannel; repeat until relieved.

If you will cut the hind legs of your chair a little shorter than the front ones the fatigue of sitting will be lessened, and your spine will be in a better position.

If wakeful at nights get up, walk about the room, go to the window and take a dozen deep breaths, rub your skin all over with a coarse towel or with the hands; then crawl into bed and go to sleep.

Have a thermometer in the living-room and do not let the mercury go above seventy degrees. Higher than that is too high for health. Any room that is too warm and dry for window plants is unfit to live in.

In biting off a needleful of thread, it is often noticed that the silk tastes sweet. This should warn the sewer to use her scissors, and not her teeth, as the sweet taste comes from the sugar of lead used in dyeing and weighing the silk.

Heavy suppers of rich food, with coffee, are damaging to health, and sooner or later will undermine the strongest constitution. Because one can stand it one or five years is no sign they will not floor him at last. Eat a light supper.

Warm flannels, perfect protection for feet and legs, abundant clothing, a saddle horse six or eight hours a day, in the open air in all weathers, wheat, oats, and beef in generous quantities, much friction of the skin and plenty of sleep, cure a person threatened with consumption. When a doctor has given his advice to such a patient he has done all he can for him.

Buckskin lining in shoes is nice for ladies and girls who suffer with cold feet. Thin soles of cork ought also to be placed between the leather soles, to keep dampness out. If not too lazy, to go out on the porch and hop around for fifteen minutes; this for those who suffer from chronic cold feet. If you have headache it comes most likely from cold feet, defective vision that needs rectifying glasses, or disordered stomach from eating too much rich food.

To those accustomed to "bolt" their food, nothing tastes good which is not highly flavored or spiced. Everything must be peppered or sugared unless already highly seasoned, in order to make some impression upon the nerves of taste, located in the mouth, as the food hurries through. While to persons accustomed to chew their food deliberately, the plainest forms of well-cooked, wholesome food afford great pleasure to the palate. Children should be encouraged to eat without drinking, in order that they may be led to moisten their food with saliva, thus preparing it for good digestion.

If you need a light through the night, cut a circular piece of thin wrapping paper, twist the center of it into a small point for a wick, lay it in a saucer and pour melted lard around it. This should be done in the daytime that the lard may harden before night.

Put some ice in a towel, and crush it till it is as fine as snow, and of an even fineness. Then squeeze on it the juice of an orange, or lemon, whichever is desired by physician, or patient, and sprinkle over it a little sugar. It is a very pleasant food for persons with scarlet fever, or sore throat, and a lady of our acquaintance claims to have cured her children of diphtheria by its aid.

Profuse spitting is injurious in several ways. The saliva is poured into the mouth to do a specific work, and then should pass into the stomach to be absorbed. If it is constantly ejected from the mouth, the system is drained of what it was not intended to lose, and the mouth then becomes an organ of excretion, thus taking away from the kidneys a part of the work they are designed to do.

Health in Youth.—Late hours, irregular habits, and want of attention to diet, are common errors with most young men, and these gradually, but at first imperceptibly, undermine the health, and lay the foundation for various forms of disease in after life. It is a very difficult thing to make young persons comprehend this. They frequently sit up as late as twelve, one, or two o'clock, without ex-

periencing any ill effects; they go without a meal to-day, and to-morrow eat to repletion, with only temporary inconvenience. One night they will sleep three or four hours, and the next nine or ten; or one night, in their eagerness to get away into some agreeable company, they will take no food at all; and the next, perhaps, will eat a hearty supper and go to bed upon it. These, with various other irregularities, are common to the majority of young men, and are, as just stated, the cause of much bad health in mature life. Indeed, nearly all the shattered constitutions with which too many are cursed, are the result of a disregard to the plainest precepts of health in early life.

Health—rules for the preservation of.—Pure atmospheric air is composed of nitrogen, oxygen, and a very small proportion of carbonic acid gas. Air once breathed has lost the chief part of its oxygen, and acquired a proportionate increase of carbonic acid gas; therefore, health requires that we breathe the same air once only.

The solid parts of our bodies are continually wasting, and requires to be repaired by fresh substances; therefore, food, which is to repair the loss, should be taken with due regard to the exercise and waste of the body.

The fluid part of our bodies waste constantly; there is but one fluid in animals, which is water; therefore, water only is necessary, and no artifice can produce a better drink. The fluid of our bodies is to the solid in proportion as nine to one. A like proportion should prevail in the total amount of food taken.

Light exercises an important influence upon the growth and vigor of animals and plants. Our dwellings should freely admit the solar rays.

Decomposing animal and vegetable substances yield various noxious gases which enter the lungs and corrupt the blood. All impurities should be kept away from our abodes, and every precaution be observed to secure a pure atmosphere.

Warmth is essential to all the bodily functions; therefore, an equal bodily temperature should be maintained by exercise, by clothing, or by fire. Exercise warms, invigorates, and purifies the body; clothing preserves the warmth the body generates; fire imparts warmth externally. To obtain and preserve warmth, exercise and clothing are preferable to fire. Fire consumes the oxygen of the air, and produces noxious gases; therefore, the air is less pure in the presence of candles, gas, or coal fire, than otherwise, and the deterioration should be repaired by increased ventilation.

The skin is a highly-organized membrane, full of minute pores, cells, blood-vessels, and nerves; it imbibes moisture or throws it off, according to the state of the atmosphere and the temperature of the body. It also "breathes," as do the lungs, though less actively. All the internal organs sympathize with the skin; therefore, it should be repeatedly cleansed.

Late hours and anxious pursuits exhaust the nervous system, and

produce disease and premature death; therefore, the hours of labor and study should be short.

Mental and bodily exercises are equally essential to the general health and happiness; therefore, labor and study should succeed each other.

Man will live most healthy upon simple solids and fluids, of which a sufficient but temperate quantity should be taken; therefore, strong drinks, tobacco, snuff, opium, and all mere indulgences should be avoided.

Sudden alternations of heat and cold are dangerous, especially to the young and the aged; therefore, clothing, in quantity and quality, should be adapted to the alterations of night and day, and of the season. Also, drinking cold water when the body is hot, and hot tea and soup when cold, are productive of many evils.

Moderation in eating and drinking, short hours of labor and study, regularity in exercise, recreation, and rest, cleanliness, equanimity of temper and equality of temperature, these are the great essentials to that which surpasses all wealth—health of mind and body.

Heaves in Horses—several remedies for.—1. A correspondent recommends sunflower seed as a cure for the heaves in horses. He had one bushel of the seed ground with two bushels of oats, and gave a horse two quarts of the mixed meal, wet in warm water, three times a day. He took the time when the horse was not used at hard work. In two weeks not a sign of the heaves could be observed, and the horse looked as sleek and bright as if his hair had been oiled. He had cured two horses of his own of this distressing complaint, and recommended it to others, who had experienced a like result. In cases of horse distemper and coughs, it is an excellent remedy.

2. Very bad cases of heaves have been cured by simply feeding the animal upon cut and moistened feed, of very good quality and in small quantities, three times a day. For instance, four pounds of timothy hay and three quarts of feed made of equal quantities of oats, corn, and wheat bran ground together. With this was mixed a small quantity of salt, and twice a week one dram of sulphate of iron and half an ounce of ground gentian root were given in the feed. A liberal bran mash every evening will also be very useful. A horse that cannot be cured by this treatment is of no value, and may be considered past cure.

3. Asafœtida, pulverized, one ounce; camphor gum, pulverized, one-half ounce; mix and divide into four powders; feed one every other night for a week.

4. Balsam of fir and balsam of copaiba, four ounces each, and mix with calcined magnesia sufficiently thick to make it into balls; and give a middling-sized ball night and morning for a week or ten days.

Hemorrhage—to relieve.—To stop hemorrhage of the lungs, cord the thighs, and arms above the elbow, with small, strong cords tightly drawn and tied. It will stop the flow of blood almost in-

stantly, as it has done for the writer many times. It was recommended by a physician of experience.

Household Hints.—Do not deposit wood ashes in a wooden vessel or upon a wooden floor.

Never use a light in examining a gas-meter.

Never take a light into a closet.

Never read in bed by candle or lamp light.

Never put kindling wood on top of the stove to dry.

Never leave clothes near a grate or fire-place to dry.

Be careful in making fire with shavings, and never use any kind of oil to kindle a fire.

Keep all lights as far from curtains as possible.

Always fill and trim your lamps by daylight, and never near a fire.

Good nice pie-crust can be made by always observing the following rule. One-quarter of a cup of shortening to every cup of flour used; to be mixed as dry as possible with cold water, and mixed only with a knife.

Take sweet butter only for baking purposes, and never fail to thoroughly beat together your butter and sugar, if you would be sure of good results in cake baking.

Have metal or earthen vessels for matches, and keep them out of reach of children. Wax matches are not safe.

Ground mustard mixed with a little water is an excellent agent for cleansing the hands after handling odorous substances.

Cut hot bread or cake with a hot knife, and it will not be clammy.

Salt extracts the juices of meat in cooking. Steaks ought therefore not to be salted until they have been broiled.

In boiling dumplings of any kind, put them in the water one at a time. If they are put in together they will mix with each other.

Do not cut lamp-wicks, but trim them by wiping off with a scrap of paper.

Never boil vegetables with soup stock, for if you do it will certainly become sour in a short time.

Boil your cream for coffee, and see if the coffee will not taste better, as well as keep hot longer.

Pin-cushion covers made of cheese cloth embroidered and trimmed with lace, wear well and keep their looks.

Some one says that leaves of parsley, eaten with a little vinegar, will destroy the odor of breath tainted by onions.

Hot liquid lye is recommended for removing obstructions in waste pipes. Or let the potash dissolve over night in the pipes.

To wipe dust from papered walls take a clean, soft piece of flannel. Of course it must not be damp, but the dry flannel will remove the dust.

Varnish the soles of your shoes, and it will render them impervious to dampness, and will also make them last longer. This is a good plan.

Clean the mica in stove doors with vinegar. Take clinkers out of stoves by putting a few oyster shells into the grate, when they will become loosened, and may be removed without injuring the lining.

Save the droppings from spermaceti candles, tie them in a cloth, and keep to smooth rough flat-irons.

Never starch napkins.

An old black bunting or cashmere dress may be made to serve a further period of usefulness by being made into a petticoat.

Between two evils choose neither.

Writing a will does not shorten life, and yet many men fear it will.

Save old suspender rings, and sew them on the corners of kitchen holders to hang them up by. It will be easy then to flip them on to a nail, and they will not be so likely to get lost.

Powdered borax with a little sugar, blown into the cracks and crevices with a small bellows, will drive away house-ants.

Have a high stool in the kitchen to sit on when tired, to continue your work if necessary. Perched on its top you can wash dishes or iron with ease. A low stool placed on a wooden chair forms a substitute, but a poor one. A soft sheep-skin mat is restful to stand upon.

There is nothing better for cleaning brass or copper than coal ashes. They are also good to scour knives and forks with. For tin, whiting or fine sand is best.

To cleanse jars or jugs or any earthen vessel slaked lime is good, or warmed lye.

To keep a stove smooth, take a coarse and pretty large piece of flannel, roll it hard, and dip it in fine sand. Proceed to rub your stove whenever you are through cooking. Almost any stove will look better for being done the same way occasionally. Boiled starch is also very good to keep a stove looking well; put it on where it will not burn off—around the back and sides where it doesn't get very hot.

Hens—how to make lay.—While on a visit in the fall to a friend we were surprised to see the number of eggs he daily obtained. He had but sixteen hens, and the product per diem averaged thirteen eggs. He was in the habit of giving, on every alternate day, a teaspoonful and a quarter of cayenne pepper, mixed with soft food, and took care that each hen obtained her share. The experiment of omitting the pepper was tried, when it was found that the number of eggs was reduced each trial from five to six daily. We believe that the moderate use of this stimulant not only increases the number of eggs, but effectually wards of diseases to which chickens are subjected.

Hen Lice—to drive away.—The only reliable means of ridding the hen-roost and pigeon-loft of vermin is a preparation of sulphur and carbon, technically known as sulphuret carbon. In France it has been thoroughly tested, and it works like a charm. It kills the

insects which prey upon pigeons and fowls, without injuring the birds. A bottle containing the solution will last several days, and the cost of it is small. Put two ounces of the sulphuret of carbon in a bottle open at the mouth and hang it by a string in a hen-house. At the end of eight days the bottle should be refilled. The remedy is said to be infallible. If as good as claimed to be, it should be known to every farmer's wife and poultry raiser in the country.

Hens—to make lay the whole year.—Give each hen half an ounce of fresh meat every day, and mix a small amount of red pepper with their food during the winter. Give them plenty of grain, water, gravel and lime, and allow no cocks to run with them.

Hens—rules for setting.—Be sure that your hen wants to sit and is contented with her location.

Select your eggs from hens that are known, and do not trust to those from a neighbor.

Do not use eggs that are from yards containing more than ten hens to one cock.

After the hen is on the nest do not disturb her, and place her nest where the other hens cannot mo est her.

Let the nest be in a warm location in winter, and in a cool place in summer.

See that everything is clean around her nest, and keep food and water within easy access.

Provide a dust bath, and be on the watch for the appearance of lice. Should they appear, use the Persian insect powder.

The eggs used should be as fresh as possible—the fresher the better.

After the egg is " pipped " do not open the shell any to assist the chick, as the fluids will evaporate before the chick is ready to come out.

Lice make the hen restless, and as this causes a constant change of temperature in the nest, poor hatches will be the result.

Let the food for the hen be of a variety, and plentiful.

Do not feed the young chicks until they are twenty-four hours old.

These rules are not hard to observe, and are necessary if good hatches are to be expected.

Hiccoughs—to cure.—Take a small piece of lump sugar into the mouth, and let it dissolve very slowly, or drink any liquid very slowly, and the hiccoughs will cease.

Hide Bound Horse—to recruit.—To recruit a hide bound horse, give nitrate potassa (or saltpeter), four ounces; crude antimony, one ounce; sulphur, three ounces. Nitrate of potassa and antimony should be finely pulverized, then add the sulphur, and mix the whole well together. Dose, a tablespoonful of the mixture in a bran mash daily.

Hints to Callers on the Sick.—Only call at the door, unless you are sure your friend is able to see you without harm.

Enter and leave the house, and move about the room quietly.

Carry a cheerful face, and speak cheerful words.

In order to cheer you need tell no lies.

If your friend is very sick do not fall into gay and careless talk in the attempt to be cheerful.

Do not ask questions, and thus oblige your friend to talk.

Talk about something outside, and not about the disease and circumstances of the patient.

Tell the news, but not the list of the sick and dying.

If possible carry something with you to please the eye and relieve the monotony of the sick-room, a flower, or even a picture, which you can loan for a few days.

If desirable, some little delicacy to tempt the appetite will be well bestowed; but nothing could be more a complete illustration of mistaken kindness than the common custom of tempting sick persons to eat such unwholesome things as rich cakes, sweetmeats, etc.

Hoarseness—remedies for.—1. Horseradish will afford instantaneous relief in most obstinate cases of hoarseness. The root, of course, possesses the most virtue, though the leaves are good till they dry, when they lose their strength. The root is best when it is green. The person who will use it freely just before beginning to speak, will not be troubled with hoarseness. I would like to add that the root boiled down and sweetened into a thick syrup will give relief in the severest cases. It was formerly used in this way in our family, and though very bad to take, never failed to give relief.

2. When the voice is lost, as is sometimes the case, from the effects of a cold, a simple, pleasant remedy is furnished by beating up the white of one egg, adding to it the juice of one lemon and sweetening with white sugar to taste. Take a teaspoonful from time to time. It has been known to effectually cure the ailment.

3. Boil two ounces of flaxseed in one quart of water, strain, and then add two ounces of rock candy, half a pint of syrup or honey, and the juice ot three lemons; mix, and then boil together. Let it then cool, and bottle for use. Take one cupful before going to bed —the hotter you drink it the better.

4. Miss Parloa gives this cure for hoarseness: Bake a lemon or sour orange for twenty minutes in a moderate oven, then open it at one end and dig out the inside, which sweeten with sugar or molasses, and eat. This will cure hoarseness and remove the pressure from the lungs.

Holland Gin.—To one hundred gallons of rectified spirits add (after you have cut the oils well) one and one-half ounces of the oil of English juniper, one-half ounce of angelica essence, one-half ounce of the oil of coriander, and one-half ounce of oil of caraway; put this into the rectified spirit and rummage well. This is strong gin. To make this up, as it is called by the trade, add forty-five pounds of loaf sugar dissolved, then rummage the whole well together with four ounces roche alum. For finings, add four ounces salts of tartar.

Home Devices.—To make a serviceable handkerchief case, take a

piece of black oil-cloth (you can get it at any harness-maker's), cut one piece six and one-half by seven inches for the back; then cut four pieces, three-cornered, two of them seven and one-half inches on one side, and five on the other sides, and the other two, six and one-half inches on one side and five on the other two sides. Now bind each piece with narrow ribbon and line them, turning in the edges and catching it down nicely on the binding. Now lay them on the back, the long sides on the longest of the back, etc., then sew over and over on the right side; this brings the points all in the center. Fasten the two end points together and put a hook on one side-point, and an eye on the other. Then put a little bow on the outside.

To make burned-match receivers of spice boxes: Crochet a cover; begin with a chain long enough to reach around the bag; join it and crochet it deep enough to cover the bag. Then make a row of scallops around the top and bottom, but do not put a bottom in, as the bag will stay just as well, if it is not too loose. Now make a chain about half a yard long and sew it on opposite sides of the cover to hang it up by.

Take small boxes, such as ink comes in, or about that size; then take an old quilt or old pieces of cloth (you can stuff it as much as you like), and lay it on the bottom of the box outside, or turn the box upside down. Now nail a piece of carpet over this and put a piece around the side, turning the edge and nailing it on the inside. They make pretty stools and are inexpensive.

Hints for Home Comforts.—A short needle makes the most expedition in plain sewing

When you are particular in wishing to have precisely what you want from a butcher's, go and purchase it yourself.

People in general are not aware how very essential to the health of their inmates is the free admission of light into their houses.

A leather strap, with a buckle to fasten, is much more convenient than a cord for a box in general use; cording and uncording is inconvenient

Sitting to sew by candle-light by a table with a dark cloth on it is injurious to the eye-sight. When no other remedy presents itself, put a sheet of white paper before you.

People very commonly complain of indigestion; how can it be wondered at, when they seem by their habit of swallowing their food wholesale, to forget for what purpose they are provided with teeth.

Never allow your servants to put wiped knives on your table; for, generally speaking, you may see that they have been wiped off with a dirty cloth. If a knife is brightly cleaned, they are compelled to use a clean cloth.

There is not anything gained in economy by having very young and inexperienced servants at low wages; they break, waste, and destroy more than an equivalent for higher wages, setting aside comfort and respectability.

Home Education.—The following rules are worthy of being printed in letters of gold, and placed in a conspicuous place in every household:

From our children's earliest infancy inculcate the necessity of instant obedience.

Unite firmness with gentleness. Let your children always understand that you mean what you say.

Never promise them anything unless you are quite sure you can give what you say.

If you tell a child to do something, show him how to do it and see that it is done.

Always punish your child for wilfully disobeying you, but never punish him in anger.

Never let them know that they vex you, or make you lose your self-command.

If they give way to petulance or ill-temper wait till they are calm, then gently reason with them on the impropriety of their conduct.

Remember that a little present punishment, when the occasion arises, is much more effectual than the threatening of a greater punishment, should the fault be renewed.

Never give your children anything because they cry for it.

On no account allow them to do at one time what you have forbidden, under the same circumstances, at another.

Teach them that the only sure and easy way to appear good is to be good.

Accustom them to make their little recitals with perfect truth. Never allow tale bearing.

Teach them self-denial, not self-indulgence.

Honey (Artificial).—1. Mix together ten pounds white sugar, two pounds clear bees' honey, one quart hot water, half an ounce cream tartar; when cold, flavor with two or three drops attar of roses, and sprinkle in a handful of clear, yellow honey-comb, broken up. This will deceive the best judges, and is perfectly healthful.

2. Take ten pounds good white (brown) sugar, three pounds soft water, two and one-half pounds bee bread honey, forty grains cream tartar, twelve drops of oil of peppermint, three ounces gum arabic, one drop attar of rose, put them into a brass or copper kettle, and boil them for five minutes; then take two teaspoonfuls of pulverized slippery elm and mix with one pound of water; then strain it and mix it into the kettle; take it off and beat up the white of two eggs and stir them in; let it stand two minutes, then skim it well, and when nearly cold add one pound of pure bees' honey, and so on for larger quantities.

Honey—to separate from wax.—Put honeycomb and all in a tin pan upon a moderately warm stove, adding a tablespoonful of water to each pound of honey. Stir occasionally with a piece of wire until the contents of the pan are in a liquid condition. Do not allow boiling to begin. Remove the pan from the fire, and set it aside to cool

The cake of wax, to which all impurities will adhere, may then be carefully lifted off with a knife.

Hops (The)—uses of.—The hop is a narcotic, tonic, and diuretic; it reduces the frequency of the pulse, and does not effect the head, like most anodynes.

Used externally, it acts as an anodyne and discutient, and is useful as a fomentation for painful tumors, rheumatic pains in the joints, and severe contusions. A pillow stuffed with hops acts as a narcotic.

When the powder is mixed with lard, it acts as an anodyne dressing in painful ulcers.

Dose.—Of the extract, from five grains to one scruple; of the tincture, from half a dram to three drams; of the powder, from three grains to one scruple; of the infusion, half an ounce to one and a half ounces.

Hoof-ail in Sheep.—Muriatic acid and butter of antimony, of each two ounces; white vitriol, pulverized, one ounce; mix. Lift the foot, and drop a little of it on the bottom, only once or twice a week. It kills the old hoof, and a new one soon takes its place.

Horn—in imitation of tortoise-shell.—First steam, and then press the horn into proper shape, and afterward lay the following mixture on with a small brush, in imitation of the mottle of tortoise-shell. Take equal parts of quicklime and litharge, and mix with strong soap-lees. Let this remain until it is thoroughly dry; brush off, and repeat two or three times if necessary. Such parts as are required to be of a reddish brown should be covered with a mixture of whiting and the stain.

Horn (The)—to curve.—Rasp the horn on the outside if you wish to turn the horn in. It will give life to that part, and increase its growth wonderfully on the side rasped. You can give the horn any shape you please by scraping.

Horn (Cows')—to polish.—The cow's horns can be easily polished in the following way: Take a rather coarse file and file all of the rough places as smooth as convenient; then take No. 2 sand-paper and rub until a good surface is obtained, then No. 1, and follow with No. 0. After all of the scratches from the coarser sand-paper are removed, rub with rotten-stone and oil on a woolen rag. This will give it a mirror-like polish if all of the scratches are previously removed.

Horn—to polish and mount.—Boil the horn to remove the pith unless it is already out. Scrape with glass or a sharp knife, dipping the horn in hot water occasionally to keep it soft. When all the roughness and spots are off, rub with fine sand-paper or emery paper around the horn. When as smooth as they can be made in this way, take powdered pumice-stone or rotten-stone, with a flannel cloth and linseed oil, and rub lengthwise until all the sand-paper marks are removed; then rub with a clean flannel cloth till fully polished. It is said that after this a cotton cloth, and finally tissue paper, will produce a still higher polish, and I think it worth trying. A pair of

horns can be mounted by taking a block of wood long enough to extend into the horns, leaving them the original distance apart. Then fill the horns with wet plaster of Paris, and push them on the ends of the block. When dry they will be solid, and covered with satin or plush, they will be "perfectly splendid." The block may be rounded at the top and flattened at the bottom, so as to set securely on a shelf or bracket.

Horse (Balky)—cure for.—I would prepare myself with a good strap—I want no whip; perhaps he has got a taste of that already, and still he is master. But some fine day when I was at peace with all around, I would hitch him to the buggy, turning his head to the village. He goes half the way very well indeed, then he begins to consider that he has gone far enough in that direction, and stops. I step down; he expects me to use the whip. As a criminal I treat him on the silent system. I push him back a little out of the way. I show him the strap, putting it up to his nose. I go to the off side and buckle it to his fore leg, close up to his breast, throwing the other end over his shoulder; I then raise his near foot and fix it near the hoof, nearly touching the belly. This done, I say: "Now, old chap, you just stand there." I don't smoke, so I take a paper from my pocket, and finding a place where I can sit down, and he sees me, I begin to read. This is something he did not bargain for, and the novelty of standing on three legs somewhat diverts his mind from the cause that stopped him. I think this is the chief point to be gained, and the most humane. When the strap is taken off I show it to him, caress him a little, and we move on without irritation. The strap will now become a part of the harness for a month or two, till at last the sight of it will act as a talisman.

Horse (Balky)—cure for.—1. Hermann Koon, my German neighbor, is as patient a man as belongs to that patient race. Coming along the road a month or so ago, I saw Hermann lying in a fence corner, under the shade of an elm, quietly smoking his pipe. A quarter of a mile or so beyond I saw Hermann's horse and buggy by the roadside, the horse evidently tied to a post. This was a queer condition of affairs, for my neighbor is one of the most industrious men I know. My curiosity was aroused, and I stopped for an explanation. In broken English he told me his horse, a recent purchase, had proved balky, had stopped where he now stood, and no amount of coaxing could induce him to go on. Hermann did not curse the animal; he did not strike it with his whip, beat it with a club, build a fire under its belly, nor resort to any other of the brutal means some men use in such cases. He quietly got out of the buggy, led the horse to the post, and walked off, leaving it to its own reflections. Hermann had been taking it easy under the tree for three long hours. He thought the horse would be glad to go now if requested to do so. It had once before stopped with him, and after a patient waiting alone, for an hour, it went on all right. He expected about four hours, this time, would effect a permanent cure of the bad

habit. I went on about my business, leaving the stolid German to his pipe and his thoughts. To-day I met him again. He said the horse was eager to start when he went back to the buggy, and though he has used it every day since, no disposition to balk has been manifested. He believes there will be no repetition of the offense. Most men think they cannot afford to waste time in this way, perhaps, but if the horse is cured he is a valuable one; whereas, if it had become a chronic balker, through cruel management, it would be worthless. Hermann thought he could not make money faster than by saving the reputation of his horse. It is a new system, but Hermann says it will work well every time, if the horse is not naturally vicious.

2. One method to cure a balky horse is to take him from the carriage and whirl him rapidly around till he is giddy. It requires two men to accomplish this—one at the horse's tail. Don't let him step out. Hold him to the smallest possible circle. One dose will often cure him, two doses are final with the worst horse that ever refused to stir. Another plan is to fill his mouth with the dirt or gravel from the road, and he will at once go, the philosophy of this being that it gives him something else to think about.

Horse Blanket—to make.—Four jute bran sacks sewed together will make a horse blanket that is not too warm, nor too expensive for nightly use in the barn. They are sufficiently porous to allow a wet horse to dry off in the stable, and yet are a considerable protection from cold currents of air.

Horses—breaking and training (Rarey's directions).—In training horses you must remember that there are certain natural laws that govern them. For instance, it is natural for him to kick whenever he gets badly frightened; it is natural for him to escape from whatever he thinks will do him harm His facilities of seeing, hearing, and smelling, have been given him to examine everything new that he is brought in contact with. And so long as you present him with nothing that offends his eyes, nose, or ears, you can then handle him at will, notwithstanding he may be frightened at first, so that in a short time he will not be afraid of anything he is brought in contact with. All of the whipping and spurring of horses for shying, stumbling, etc., is useless and cruel. If he shies, and you whip him for it, it only adds terror, and makes the object larger than it would otherwise be; give him time to examine it without punishing him. He should never be hit with the whip, under any circumstances, or for anything that he does. As to smelling oil, there is nothing that assists the trainer to tame his horse better. It is better to approach a colt with the scent of honey or cinnamon upon your hand, than the scent of hogs, for horses naturally fear the scent of hogs, and will attempt to escape from it, while they like the scent of honey, cinnamon, or salt. To affect a horse with drugs you must give him some preparation of opium, and while he is under the influence of it, you cannot teach him anything more than a man when he is intoxicated with liquor. Another thing, you must remember to treat him kindly,

for when you require obedience from any subject, it is better to have it rendered from a sense of love than fear. You should be careful not to chafe the lips of your colt or hurt his mouth in any way; if you do he will dislike to have the bridle on. After he is taught to follow you, then put on the harness, putting your lines through the shaft straps along the side, and teach him to yield to the reigns, turn short to the right and left, teach him to stand still before he is ever hitched up; you then have control over him. If he gets frightened, the lines should be used as a telegraph, to let him know what you want him to do. No horse is naturally vicious, but always obeys his trainer as soon as he comprehends what he would have him do; you must be firm with him at the same time, and give him to understand that you are the trainer, and that he is the horse. The best bits to be used to hold a horse, to keep his mouth from getting sore, is a straight bar-bit, four and one-half inches long between the rings; this operates on both sides of the jaw, while the ordinary snaffle forms a clamp and presses the side of the jaw. The curb or bridoon hurts his under jaw so that he will stop before he will give to the reign. To throw a horse, put a rope twelve feet long around his body in a running noose, pass it down to the right fore foot through a ring in a spancil, then buckle up the left or near fore foot, take a firm hold on your rope, lead him around until he is tired, give him a shove with your shoulder, at the same time drawing up the right foot which brings him on his knees, hold him steady, and in a few moments he will lie down. Never attempt to hold him still, for the more he snuffles the better.

Take your colt into a tight room or pen, and with a long whip commence snapping at the colt's hind leg, taking care not to hit above the hocks, stopping immediately when the colt turns his head toward you; while his head is toward you, approach him with the left hand extended toward him, holding your whip in the right, ready to snap him as soon as he turns his head from you. In this way you can soon get your hands upon him. As soon as you have done this, be careful to caress him for his obedience, and snap him for his disobedience. In this way he will soon learn that he is safest in your presence with his head toward you, and in a very short time you cannot keep him away from you. Speak kindly and firmly to him, all the time caressing him, calling by name, and saying. "Ho, boy," or "Ho, Dina," or some familiar word that he will soon learn.

If a colt is awkward and careless at first, you must bear with him, remembering that we, too, were awkward when young; allowing him his own way, until by degrees he will come in. If he is wilful, you must then change your course of treatment, by confining him in such a way that he is powerless for harm until he submits. If he is disposed to run, use my pole check on him; if to kick, fasten a rope around his under jaw, pass it through the collar and attach it to his hind feet. In this way one kick will cure him, as the force of the blow falls on his jaw. If he should be stubborn, lay him down and

confine him until you subdue him, without punishing him with the whip.

Colts should be broke without blind-bridles; after they are well broke, then you may put on blinds. Bridles without blinds are the best unless you want to speed your horse, then it will be necessary to keep him from seeing the whip. Colts should be well handled and taught to give readily to the reign before they are hitched up. If you hitch them up the first thing and they become frightened, then you have no control over them; but if you teach them to start, stop, and stand at the word before they are hitched, then you can govern them.

Horses—cruelty to.—Besides the cruel punishment inflicted upon horses, by the careless and heartless driver, he is subjected to severe punishment in the winter season, by being compelled to take frozen bits into his mouth in cold weather, tearing the skin from the tongue and the roof of his mouth, producing a heavy inflammation in the mouth and throat; he gets poor, hidebound, and the sympathetic nerves of the head take up the inflammation, carry it to the head and eyes, frequently producing blindness, and a hundred other diseases. The whip should be used as an instrument of pleasure instead of torture; and your bits should be wound with flannel or leather; so that no frozen iron will come in contact with his mouth, lips, or tongue.

Horseshoeing — Rarey's directions for. — There are very few blacksmiths that ever once think what a complicated piece of machinery the foot of a horse is, and by one careless blow they frequently stop the working of this machine. The majority of smiths, as soon as they pick up a horse's foot, go to work paring the heel, from the fact that it is the most convenient part of the foot, and thereby destroy the heel and braces of the foot, causing, in many instances, contracted heels. The heel of a horse should be well kept up and the toe down. By lowering the heels you throw the entire weight of your horse upon the back tendon of the legs, and thereby produce lameness from overtaxing a very important set of tendons. By keeping up the heel you throw the weight upon the wall of the foot. In this position you prevent stumbling, clicking, etc. Next the shoer commences to pare away the sole, thins it down until he can feel it spring with his thumb. Ask him why he does this, and he gives you no reason, except from custom ; next comes the bars or braces of the foot, they are smoothed down ; next in his ruinous course, comes the frogs of the feet, they are subjected to the same cutting and smoothing process. All the cutting, paring and smoothing of the soles, bars, or frogs is a decided injury to the horse as well as to the owner. All the corns in the land are produced by this process of paring. The frogs have been placed in the foot by nature to expand the wall of the foot, and as soon as you commence to cut it, the oily substance commences to leak out, it dries up, becomes hard, losing its oily substance, makes the wall hard and dry, inducing it to crack. The nerves of the feet are very sensitive, and smiths should be very careful not to prick the foot, as it requires quite a time to relieve them.

The foot is a very complicated piece of machinery, and if you keep a horse well shod and his foot in good condition, you can then generally manage the balance. The feet suffer from being kept too dry. Horses that stand on board floors should have their feet wet every day, or there should be a vat five inces deep, five feet long, and three wide, filled with water and clay, in which each horse can stand for one hour per week, unless his feet are feverish, then he should be kept in it an hour per day, or until the fever subsides. Another source of injury to horses' feet, is the habit of patronizing cheap blacksmiths. If a man can drive a nail, he then sets up a sign as a farrier or a veterinary surgeon, when in fact he knows nothing of the anatomy of the horse's foot; not having spent any time or money in acquiring the necessary information, he can afford to shoe a few shillings cheaper than a well-informed man; but the patrons of such cheap shoeing are generally the sufferers. All horseshoers should be well skilled veterinary surgeons, or there should be a skilful surgeon attached to every shop. Another source of poor shoeing and injury is the loss of elasticity of the frog, refusing to perform its proper functions; the heel contracts, the foot rolls, and you have a sore horse for ten or twelve months, for it requires this long to relieve a horse's suffering from being badly shod.

Under the circumstances, the first thing that touches the road or the floor of the stall, should be the frog, and the wall of the foot should be kept cut so as not to prevent it from touching at every step; and no man that owns a horse should ever allow a blacksmith to cut the soles, bars, or frogs of his horse's feet. Nature has adapted the frogs to all description of roads, climates, and weather, without being pared. So many horses have been ruined by this process of paring that there are now several establishments in this country that manufacture India rubber pads, thinking thereby to supply the wasted frog and the elasticity of the natural foot. The frog is insensible to pressure, and you may place the whole weight of your horse on the frog and he will suffer no inconvenience, as may be seen from shoeing with one of my corn shoes; besides, this is the only reliable way to cure contracted feet; by throwing the weight upon the frog, you force them up between the walls; it acts as a wedge, and soon relieves the contracted feet. Smiths should never have their shoes hot when fitting them, as the application of hot iron extracts the oily substance from the hoof. The amount of cruel punishment inflicted on horses by cross-grain blacksmiths, is another source of poor shoeing. As soon as the horse does not stand the smith gets angry, and commences whipping and jerking the animal, which only adds terror to it, so that he soon refuses to go to the shop if he can avoid it; it is natural for horses to dislike to be shod, because the hammering shocks the nervous system, until they are accustomed to it. He should be taught to stand, and his feet well handled at home, before he is ever brought to the shop by the owner. You then save the horse pounding, and the smith an immense amount of labor that he never gets

any pay for, for no man ever thinks of paying anything extra for shoeing a bad horse. The wall of the foot should never be rasped above the nail holes, and as little below the clinches as possible; all the rasping and filing but tends to thin and weaken the wall by cutting the fibers of the foot. The nails should be counter-sunk into the shoe, so that there will be no chance fer the clinches to rise. No horse interferes with the heel or toe; it is always the side of the foot. The habit of turning the inside of the shoe under causes a number of horses to interfere that would not if they were shod straight in the inside. Spread the heels as wide as possible; fet the outside a little under; keep the toes full. For clicking horses, raise the heels high, cut the toes short. For speedy cuts, place your toe corks a quarter of an inch to the inside of the center of your shoe; keep the heels wide apart. For corns, put on a shoe with a prong, for the main rim, so as to cover the entire frog; pare the wall lower than the frog, so that his entire weight will be thrown on the frog. Have the inner cork not quite so sharp as the outer one, so that if he steps upon the other foot it will not cut it; make the shoes as light as possible consistent with good service, as they are ordinarily made just about one-third too heavy."

Horses—how to judge them.—If the color be light sorrel, or chestnut, his feet, legs, and face white, these are marks of kindness.

If he is broad and full between the eyes, he may be depended upon as a horse of good sense, and capable of being trained to anything.

As respects such horses, the more kindly you treat them the better you will be treated in return. Nor will a horse of this description stand a whip, if well fed.

If you want a safe horse, avoid one that is dish-faced. He may be so far gentle as not to scare; but he will have too much go-ahead in him to be safe with everybody.

If you want a fool, but a horse of great bottom, get a deep bay, with not a white hair about him. If his face is a little dished, so much the worse. Let no man ride such a horse that is not an adept n riding—they are always tricky and unsafe.

If you want one that will never give out, never buy a large, overgrown one.

A black horse cannot stand heat, nor a white one cold.

If you want a gentle horse, get one with more or less white about the head; the more the better. Many people suppose the parti-colored horses belonging to the circuses, shows, etc., are selected for their oddity. But the selections thus made are on account of their great docility and gentleness.

Horses' Hoof—do not burn.—Never have a red-hot shoe put on the foot of a horse to burn it level. If you can find a blacksmith who is mechanic enough to level the foot without red-hot iron, employ him. The burning process deadens the hoof and tends to contract it. If you do not believe it, try a red-hot poker on your nail, and see if it does not effect the growth.

Horses' Broken Legs—to cure.—Instead of summarily shooting the horse, in the greater number of fractures it is only necessary to partially sling the horse by means of a broad piece of sail, or other strong cloth placed under the animal's belly, furnished with two breechings and two breast girths, and by means of ropes and pulleys attached to a cross beam above, he is elevated, or lowered, as may be required. By the adoption of this plan every facility is allowed for the satisfactory treatment of fractures.

Horse Stables—cold air in.—Horses are quite sensitive to chilling draughts of air blowing upon them, and especially upon their heads; hence, in the construction of stables this should be borne in mind. Many stables have the horses face an alley, along the sides of which are doors, or a large space is left entirely open; in such cases, whenever the rear stable door and the one leading out of the alley are open, the horses stand in a chilling draught, from which they cannot escape. Horses, like many people, can stand much wind in an open field, but will catch cold while in a draught only a short time.

Horses' Hoofs (Cracks in)—to cure.—Cracks in the hoofs of horses may sometimes be cured by cutting across them with a chisel above, or below, as the case may be. The sides may be held closer together with an iron in the form of a stitch or clinch. While healing do not use the horse.

Horses' Heads—do not check.—We desire to register an earnest protest against this barbarous appendage to horses' harness. It retards the horse's progress in every position, both while he is at work, and while traveling on a journey. It is both useless and cruel in every sense of the word, without any compensating qualities to recommend it. Mr. Angell of the "Boston Society for the Prevention of Cruelty to Animals," who has traveled over a great part of Europe in the interests of humanity to our dumb servants, says that the use of the check rein is confined to America alone, being deservedly discarded everywhere, both in England and on the Continent. To check rein a horse, is equivalent to trussing a man's head backward toward his back or heels, and compelling him, while bound in this position, to do duty with a loaded wheelbarrow.

Horses on the road—how to feed.—Many persons, in traveling, feed their horses too much, and too often, continually stuffing them, nd not allowing them to rest and digest their food; of course they suffer from over-fullness, and carrying unnecessary weight. Horses should be well fed in the evening, and must not be stuffed too full in the morning, and the traveling should be moderate on starting when the horse has a full stomach. If a horse starts in good condition, he can go twenty or twenty-five miles without feeding. The provender required by horses while traveling or engaged in ordinary farm work, per day, may be stated thus: Hay twenty pounds, oats three gallons, water four gallons.

Horses—hints on feeding.—Corn is an excellent feed for horses

to work on; perhaps not so good for fast driving. Horses are more quiet and tractable on corn than with any other grain, and will do more hard pulling with less loss in condition. Oats make a horse sprightly and active; corn may make a horse dull and slow, but strong. For colts, wheat bran should be mixed with the corn; it will be lighter and less heating. Feed horses according to their age and the work required of them. Full feed and little work disorders the digestive organs. Select only such hay as is of the best quality. Poor hay is dear at any price, as there is no proper nourishment in it.

Horses—how to judge when buying.—1. Never take the seller's word. If disposed to be fair, he may have been the dupe of another, and will decieve you through misrepresentations which cannot be relied upon.

2. Never trust a horse's mouth as a sure index of his age.

3. Never buy a horse while in motion; watch him while he stands at rest and you will discover his weak points. If sound, he will stand firmly and squarely on his limbs without moving any of them, feet planted flat upon the ground, with legs plump and naturally poised. If one foot is thrown forward with the toe pointing to the ground and the heel raised, or if the foot is lifted from the ground and the weight taken from it, disease of the navicular bone may be suspected, or at least tenderness, which is a precursor of disease. If the foot is thrown out, the toe raised, and the heel brought down, the horse has suffered from lamnitis, founder, or the back sinews have been sprained, and he is of little future value. When the feet are all drawn together beneath the horse, if there has been no disease there is a misplacement of the limb at least, and weak disposition of the muscles. If the horse stands with his feet spread apart, or straddles with his hind legs, there is weakness of the loins, and the kidneys are disordered. When the knees are bent, and totter and tremble, the beast has been ruined by heavy pulling, and will never be right again, whatever rest and treatment he may have. Contracted or ill-formed hoofs speak for themselves.

4. Never buy a horse with a bluish or milky coat in his eyes. They indicate a constitutional tendency to ophthalmia, moon blindness, etc.

5. Never have anything to do with a horse who keeps his ears thrown backward. This is an invariable indication of bad temper.

6. If a horse's hind legs are scarred, the fact denotes that he is a kicker.

7. If the knees are blemished, the horse is apt to stumble.

8. When the skin is rough and harsh, and does not move easily and smoothly to the touch, the horse is a heavy eater, and digestion is bad.

9. Avoid a horse whose respiratory organs are at all impaired. If the ear is placed to the heart and a wheezing sound is heard, it is an indication of trouble.

Horses—to tell the age of.—Every horse has six teeth above and below. Before three years old he sheds his middle teeth; at three he sheds one more on each side of the central teeth; at four he sheds the two corner and last of the four teeth.

Between four and five the horse cuts the under tusks; at five will cut his upper tusks, at which time his mouth will be complete.

At six years the grooves and hollows begin to fill up a little; at seven the grooves will be well nigh filled up, except the corner teeth, leaving little brown spots where the dark brown hollows formerly were.

At eight the whole of the hollows and grooves are filled up.

At nine there is very often seen a small bill to the outside corner teeth; the point of the tusk is worn off, and the part that was concave begins to fill up and become rounding; the squares of the central teeth begin to disappear, and the gums leave them small and narrow at the top.

Horses—to prevent from jumping.—Pass a good stout surcingle around his body; put on his halter, and have the halter-strap long enough to go from his head, between his fore legs, then through the surcingle and back to one of his hind legs. Procure a thill strap, and buckle around the leg between the foot and joint; fasten the halter-strap in this—shorter or longer, as the obstinacy of the case may require. It is also useful to keep colts from running where there is likely to be danger from the result; if the thill strap should cause any soreness on the leg, it may be wound with a woolen cloth, and it would be well to change it from one leg to another occasionally.

Horses—to prevent kicking in the stall.—Fasten a short trace-chain about two feet long, by a strap to each hind foot. A better way is to have the stalls made wide enough so that the horse can turn in them easily. Close them with a door or bars, and turn the animal loose. After a while he will forget the habit, and stand tied without further trouble.

Horse Management—hints on.—Young man, I see you are about to take a drive this morning, and will offer you some advice. Your horse is restive and wants to be off before you are ready; you may as well break him of this now as at any time, and hereafter you will find it has been a half hour well spent. Just give me the reins, while you put your foot on the step, as if to get in; the horse makes a move to go; I tighten the reins and say "whoa." Now put your foot on the step again; the horse makes another move; I hold the reins and speak to him again. The horse is getting excited. Pat him a little on the neck, and talk to him soothingly. Put your foot on the step again, and repeat the process until the horse will stand still for you to get in, and adjust yourself in your seat, and tell him to go. A few such lessons will train him so that he will always wait for the order before starting. Now, as your horse has just been fed, drive him at a gentle pace for the first two or three miles, until he warms up, and his body becomes lighter. But, before you start, let me show you

how to hold the reins. Take them in the left hand, have them of equal length from the bit, and cross each other in your hand, the off side one resting on the fourth finger, the back of the hand upwards. Now, in guiding the horse, you have only to use the wrist joint, which will direct him either right or left, as you wish. Keep your hand steady, with a gentle pressure on the bit—no jerking or switching of the reins. If more speed is wanted, take the whip in your right hand, to be gently used for that purpose; be careful not to apply it harder than is necessary to bring him up to the required speed.

Speak to him soothingly, and intimate in the most gentle manner what you want him to do, and he will try to do it. So noble an animal should not be handled roughly nor overdriven.

When you return have the harness removed at once, and the horse rubbed down with a wisp of straw or hay. Give him a bite of straw or hay, and let him cool off before being watered or fed. Every one who handles a horse or has anything to do with one, should in the first place cultivate his acquaintance; let him know that you are his friend, and prove it to him by your kind treatment; he needs this to inspire confidence, and when that is gained, he is your humble servant.

If your horse gets frightened at any unusual sight or noise, do not whip him, for if you do he will connect the whipping with the object that alarmed him, and be afraid of it ever after. If he merely shies at an object, give him time to examine it, which, with some encouraging words from the driver, will persuade him to pass it. You get frightened, too, sometimes, and would not like to be whipped for it.

Horses (Rearing)—to stop.—A correspondent cured a horse of the bad habit of rearing when mounted by providing himself with a bottle of water, and dashing the contents "with violence on its head" the moment it began to get up on its hind feet. A second application was never needed.

Horse Remedies.—White lead, for bruises and breaks in the skin, saddle galls, etc.; bathing whisky, with about two ounces of turpentine, two ounces of hartshorn and a little camphor for sprains, stiffness, etc. Leaf lard for cuts. Coal oil applied to a slight sprain is also good.

Horseradish—to keep for winter.—1. Take up before frost sets in, roots of horseradish, shake the dirt from them; bury them in a box of wet sand. This will preserve their full flavor.

2. If horseradish be prepared in the fall as follows, it may be kept all winter: To each coffeecupful of horseradish allow one teaspoonful of salt, one tablespoonful of white sugar, and a pint and a half of good vinegar; bottle and seal.

Horses—to tame.—Take finely grated horse castor, oils of rhodium and cumin; keep them in separate bottles well corked; put some of the oil of cumin on your hand, and approach the horse on the windy side. He will then move toward you. Then rub some of the cumin on his nose, give him a little of the castor on anything he likes, and get eight or ten drops oil of rhodium on his tongue. You

can then get him to do anything you like. Be kind and attentive to the animal, and your control is certain.

Horses—to feed.—It is best to give a horse water before giving oats. The water stays in the stomach a very short time, but is quickly absorbed or passed into the bowels, where it is absorbed and goes into the blood. The horse secretes a very large quantity—more than four quarts—of saliva while eating a meal, which is sufficient to reduce the food to a pulp suitable for its digestion. So that to give water soon after eating, except in very small quantity, would be apt to cause indigestion and waste of the food by excessive dilution.

Hose (woolen)—to wash.—Woolen hose should be soaked all night and washed in hot suds with beef's gall, a tablespoonful to half a pail of water. Iron on the wrong side.

Hot-beds—to make.—There is no mystery about a hot-bed, yet farmers and many others do without this convenience from some supposed difficulty in making and caring for it. Sashes, a few boards and some horse manure are the materials required. Regular hot-bed sashes are three by six feet, and may be bought ready glazed at the sash and blind factories; old window sashes will answer as a makeshift, but are far less convenient. Select a place sheltered by a building or fence from cold winds; dig a pit two and a half feet deep, as wide as the sashes are long, and as long as the number of sashes to be used require. Line this pit with rough boards nailed to posts driven down at the corners. The rear board should extend a foot above the surface, and the front one four inches above. The front or lower side should face the south. Nail strips from front to rear for the sashes to slide upon.

House-Cleaning Hints.—As anything that can lessen the labor of a house-keeper is desirable, I venture to contribute my mite. Save the tea leaves for a few days, then steep them in a tin pail or pan for half an hour, strain through a sieve, and use the tea to wash all varnished paint. It requires very little rubbing or "elbow polish," as the tea acts as a strong detergent, cleansing the paint from its impurities, and making the varnish shine equal to new. It cleanses window sashes and oil cloths; indeed, any varnished surface is improved by its application. It washes window-panes and mirrors much better than soap and water, it is excellent for cleansing black walnut picture and looking-glass frames. It will not do to wash unvarnished paint with it. Whiting is unequaled for cleansing white paint. Take a small quantity on a damp flannel, rub lightly over the surface, and you will be surprised at its effects. Wall papers are readily cleansed by tying a soft cloth over a broom, and sweeping down the walls carefully. The dust and ashes of furnaces and stoves are deposited in every crack and crevice of our rooms, and requires vigilant and active treatment for their removal. Carpets absorb great quantities of them. All who can afford it will find it a great improvement to use straw matting in summer, and in autumn cover them with carpet linings, or even common newspapers, then put

down the carpets over them. Cleansing silver is not an easy task; the use of kerosene will greatly facilitate the operation. Wet a flannel cloth in oil, dip in dry whiting, and thoroughly rub the plated or silverware; throw it into a dish of scalding soap-suds, wipe with a soft flannel, and polish with a chamois skin. Your silver or plate will look equal to that exhibited in a jeweler's window, and will retain its brilliancy for six months, if once a week, when washed, it is polished with a chamois skin. Bright silver adds much to the beauty of a table, and is easily attained by this method. Some may think it will injure the plate. I have used it spring and fall for five years, and neither plated articles or silver sustain any injury. Those who use brass and irons will find it equally efficacious in restoring their brightness. Old feather beds and pillows are greatly improved by putting them on a clean grass plot during a heavy shower; let the beds become thoroughly wetted, turning them on both sides. Let them lie out till thoroughly dry, then beat them with rods; this will lighten up the feathers and make them much more healthful to sleep upon. It removes dust and rejuvenates the feathers.

Household Helps.—The use of a mop in washing dishes will be found a saving of the hands, and hotter water may be used. You need scarcely touch the water except at the last to wash the table and pans. Have a pan of clear hot water, in which dip each dish as it is washed; in another pan or shallow tin put a cup or bowl, and over that turn the saucers, plates, etc., to drain, and by the time you are ready they will be nearly dry, needing only a touch from the towel, a saving both of time and towels.

For washing vegetables, procure from a five-cent store a small scrubbing-brush, which they call a nail-brush. You will find it a great help in removing the dirt from potato-eyes, etc.

A holder is a necessary article, and catches much dirt about the stove. Make them of any old pieces of woolen. Then make a cover of some dark material. Cut a piece fifteen inches long and six inches wide, fold over six inches, and sew in form of bag, sew the end of the remaining three inches together, to make a point, fold that over and button to the bag, add a loop at the corner, and put in your holder. When the cover is soiled it can easily be removed and washed.

When you sweep a room, take down all little articles, as brackets, vases, easels, etc., dust carefully, lay them on the table and cover with a cloth. When the sweeping is done and the large articles dusted, you will be relieved to have these ready to return to their places.

When brushing and combing your hair, have a large newspaper spread on the floor. Loose hair is much easier removed from that than the carpet.

To clean hair-brushes sprinkle them well with powdered borax, let them lie half an hour, then wash and rub thoroughly. It is a good plan to clean two, as they clean better by rubbing two together.

The perfect housewife has a thorough knowledge of many little facts which render her home an exceptionally pleasant one. Without

this knowledge she is a domestic failure. Of what benefit to her are costly things if she does not know how to take care of them? She may be the best of cooks, and know how to make twenty different omelets, and if she is not acquainted with the fact that a little salt rubbed on the discolored egg-spoon will restore its silver tint, she had better not serve eggs in any shape; and if they that had the care of her youth never let her see that hot water took peach stains out of the tablecloth, or that port and claret stains were rendered null by an immediate handful of salt, wet with sherry, she might as well buy gray and parti-colored damask to begin with. If an ink spot disfigures the parlor carpet, she should know how to wash it out with milk, and clean up afterward with warm and nice soapsuds; or perhaps it is a grease spot, that could have been absorbed out of existence by frequent applications of magnesia or of buckwheat flour, if she had only known enough to sprinkle it abundantly on the spot, and brush it off afterward. Do flies collect in the dining-room during dinner? She can drive them away by leaving in the room an hour or so beforehand a little preparation of equal quantities of cream and brown sugar, and half as much black pepper. Of what use is it to her, living possibly far from bakeries and bread shops, to keep crackers, for instance, in the house, if she has never learned how to freshen them by leaving them for three minutes in a hot oven, or to prevent them being nibbed all over by ants by strewing the storeroom shelves with a few cloves, occasionally renewed? Such things are trifles, each one by itself, of course, but half a hundred such things can contribute very materially to comfort and good nature in a family, and every housemistress should be a collector of these unconsidered trifles.

House Painting—directions.—PRIMING.—Apply as thick as the paint will spread easily, rubbing out well with the brush. Use litharge as a dryer. After sandpapering and dusting, putty up all the nail heads and cracks with a putty-knife.

OUTSIDE SECOND COAT.—Mix your paint with raw oil, using it as thick as possible consistent with easy spreading. After it is applied, cross-smooth the work until it is level and even, then finish lengthwise with long light sweeps of the brush.

OUTSIDE THIRD COAT.—Make a little thinner than the last, rub out well, cross-smooth and finish very lightly with the tip of the brush.

INSIDE SECOND COAT.—Mix your paint as thick as you can work it, using equal parts of raw oil and turpentine, rub this out well and carefully with the brush, cross-smooth and finish even and nice.

INSIDE THIRD COAT.—Mix with three parts turpentine and one part of raw oil, rub out well and smooth off with great care.

FOURTH COAT, FLATTING.—Mix with turpentine alone thin enough to admit of spreading before it sets. Apply quickly without cross-smoothing, and finish lengthwise with light touches of the tip of the brush, losing no time, as it sets rapidly.

DRAWN FLATTING.—Ground white lead is mixed with turpentine

almost as thin as the last named mixture. The lead will soon settle and the oil and turpentine rise to the top; pour it off, and repeat the mixture until what rises to the top is clear turpentine. The oil being all withdrawn by this process, the lead is mixed with turpentine, and applied thickly and evenly with great care. This is used as a fourth coat, and the room must be kept shut and free from draught, as the color sets as fast as it is put on.

PLASTERED WALLS.—Give them a coat of glue size before painting in oil.

KILLING SMOKY WALLS OR CEILINGS.—Wash over the smoky or greasy walls with nitre, soda, or thin lime whitewash—the last is the best.

House Plants—care of.—With the improvements in the heating of houses, the culture of plants in our dwellings has greatly diminished. Most persons can recollect plants that have been cultivated from year to year so long that they seemed to be members of the family. Grand old lemon trees, fine specimens of laurestinus and pittosporum are now rarely seen in house culture, and the ivy, capable of such varied ornamental uses, is becoming uncommon. When our dwellings were heated by open wood fires, the chief care needed by the plants was to protect them from the cold. At present this is the least of our troubles, but others have come in its place. Still, even under all present disadvantages, plants may be successfully cultivated in the windows of the dwelling, if a few simple directions are followed. One great enemy to house plants is dust.

If there are plant shelves at the windows, or the pots are placed upon a table or stand, contrive some cover for them at sweeping time. This may be, for plants on shelves, a curtain of some light material—the lighter the better—to be suspended in such a manner as to cover them. If the plants are on a table, contrive an upright post or stick to be set in a hole in the middle of the table, to hold up the center of a spread of some kind that will cover the plants. In the absence of such protection, contrive some method of using old newspapers. Before sweeping, protect the plants by the use of a covering, and let this remain over them until the dust has completely settled.

All smooth-leaved plants, especially ivy, camellias, cape jessamine, and the like, should have their leaves washed with a soft sponge—a rag will answer—on both sides, with tepid water, at least once a week. If this is once tried, it will be found much less trouble than one would suppose, and the increased beauty of the foliage will lead to its repetition. Rough-leaved plants, such as geraniums, and many others, cannot be washed to advantage. Set these in a bath-tub or in a sink, and give their leaves a good drenching by using a garden syringe if one is at hand, or else a watering-pot, one with fine holes, holding it up high so that the water will fall with force upon the leaves.

If one allows insects to get the mastery, the case is difficult; but if the plants as soon as brought indoors have proper attention, insects

need give but little trouble. The three great remedies for insects upon house plants are: the fingers, tobacco, and water. One who loves plants and watches them, will note the first appearance of scale, mealy-bug, or other insect large enough to be readily seen, and remove it. Scale may be readily removed by a blunt knife, and mealy-bug may be picked off by a match whittled to a point. Keep a supply of tobacco-water made by pouring boiling water upon tobacco-stems or any cheap kind of tobacco. When used, this is to be diluted, as the rule goes, "to the color of boarding-house tea." Diluted in this manner it may be showered upon plants infested with plant lice. Preferably, it may be placed in a keg or tub, and the plants infested with insects dipped in it for a few seconds, moving them gently about. The most troublesome of all insects in dry rooms is the red spider, a minute mite which attacks the undersides of the leaves. When the leaves of a plant turn brown, red spider is the probable cause. A frequent application of water is the remedy. In this case, lay the pots on their sides so that the water will reach the under surface of the leaves.

If a plant is not in flourishing condition, the common remedy is water, and it is watered again and continuously until the soil in the pot is merely mud, in which only the roots of aquatic plants can live. Vastly more house plants are injured by too much than by too little water. There is but one rule for giving water to house plants, that is—give water when it is needed. There should be no indiscriminate daily watering, drenching all alike. It is far better for a plant to occasionally get a little dry, and for its leaves to flag and droop, than to keep its roots soaked by an excess of water. The soil in the pots of house plants should be moist, like that of good garden soil just below the surface. If in this condition, no more water is needed. One by observing the soil, its color, and the manner in which it feels when pressed by the finger, can soon learn to judge whether water is needed or not.

Every one who cultivates house plants should learn to readily remove the ball of earth from the pot, so that it can be inspected. By exposing the ball, the large earth worms may often be seen upon its surface, and can be picked off. These as well as smaller worms that sometimes infest the soil, may be readily killed by the use of lime-water. Slake a piece of lime as large as the fist in a pail, and when slaked, fill the pail with water, stir, and let it rest. Use the perfectly clear water upon the soil in the pots.

By observing these precautions as to dust, insects, and watering, the window cultivation of plants will be comparatively easy. Not only for the health of the plants, but of that of the inmates of the dwelling, the air, however heated, should be moistened by proper provision for the evaporation of water.

House plants ought to be stimulated gently once or twice a week. Rainwater, so refreshing to summer flowers, always contains ammonia, which also abounds in all liquid manures. If you take an

ounce of pulverized carbonate of ammonia, dissolved in one gallon of water, it will make spring water even more stimulating to your plants than rain water. If you water your plants once in two weeks with guano water (one tablespoonful to a pail of water) they will grow more thrifty.

House—how to set on fire.—1. Rub your furniture with linseed oil, and preserve carefully the old greasy rags used for this purpose, in a paper box in an out-of-the-way place.

2. If the fire in the stove does not burn well, pour benzine or kerosene on it from a well-filled gallon can.

3. When you light a cigar, or the gas, throw the burning match—no matter where, and don't look after it even if it gets into the waste-paper basket.

4. Put a burning candle on the shelf of a closet, and forget about it.

5. Always read in bed until you fall asleep with a light burning near you.

6. Always buy the cheapest kerosene you can get.

Hydrophobia—positive cure for.—The dried root of elecampane, pulverize it, and measure out nine heaping tablespoonfuls, and mix it with two or three teaspoonfuls of pulverized gum arabic; then divide into nine equal portions. When a person is bitten by a rabid animal, take one of these portions and steep it in one pint of new milk, until nearly half the quantity of milk is evaporated; then strain, and drink it in the morning, fasting for four or five hours after. The same dose is to be repeated three mornings in succession, then skip three, and so on, until the nine doses are taken.

The patient must avoid getting wet, or the heat of the sun, and abstain from high-seasoned diet, or hard exercise, and, if costive, take a dose of salts. The above quantity is for an adult; children will take less, according to age.

Hydrophobia—cure for.—The following is said to be a cure for hydrophobia: Take two tablespoonfuls of fresh chloride of lime, mix it with one-half pint of water, and with this wash keep the wound constantly bathed and frequently renewed. The chloride gas possesses the power of decomposing the tremendous poison, and renders mild and harmless the venom against whose resistless attack the artillery of medical science has been so long directed in vain. It is necessary to add that this wash must be applied as soon as possible after the infliction of the bite.

Hypophosphites—compound syrup of.—Dissolve two hundred and fifty-six grains each of hypophosphites of soda, lime and potassa, and one hundred and twenty-six grains hypophosphite of iron, in twelve ounces water, by a water bath. Filter and add sufficient water to make up for the evaporation. Add eighteen ounces sugar by gentle heat, to make twenty-one fluid ounces syrup. Each fluid ounce contains twelve grains each of the hypophosphites of soda, lime and potassa, and six grains hypophosphite of iron.

Hysterics—treatment of.—This complaint is confined chiefly to females. A fit of hysterics is generally the result of some natural and immediate cause, and until this is discovered and removed, the patient will always be subject to these fits. When a person is seized with a fit the dress should be loosened, fresh air admitted, cold water dashed in the face, and salts, or singed feathers applied to the nostrils. If consciousness does not then return, a draught of sal-volatile and water should be given, and if the patient be still insensible, the temples and the nape of the neck should be rubbed with brandy. When hysterics can be traced to impaired natural action, equal portions of pennyroyal and wormwood should be steeped in boiling water, and suffered to simmer by the fire until the virtue of the herbs is extracted. It should then be allowed to cool, and half a pint be taken twice or thrice a day, succeeded on each occasion by a compound assafœtida pill, until the desired relief is afforded.

Hysterics—cure for.—The fit may be prevented by the administration of thirty drops of laudanum, and as many of ether. When it has taken place open the windows, loosen the tight parts of the dress, sprinkle cold water on the face, etc. A glass of wine or cold water when the patient can swallow. Avoid excitement and tight lacing.

Ice—to keep.—Ice for domestic use can be well kept, packed from the air in sawdust or feathers. Small quantities may be wrapped in flannel, or put into a flannel jelly-bag, so that the water can drain off.

Ice-cask—for preserving small quantities of ice.—Take two casks, one six or seven inches longer and wider than the other; into the larger of these put charcoal powder, three or four inches deep; then place the smaller cask, filled with ice, on this, and fill up the sides between the two casks with charcoal powder rammed down tight; arrange a double cover and fill the interstice in the same way as the sides. When this is done, bore a hole one inch in diameter through the bottoms of the two casks, and insert a wooden peg to let off any water. Set the cask upon a stand, and keep it in as cool a place as possible.

Ice—to cut.—Ice may be cut into small pieces, of any shape, merely by tapping into it the point of a fine needle.

Ice—to make.—1. Get a quantity of empty barrels or boxes during the coldest time in the winter, and put a few inches of water in each; the evening when the cold is most intense is the best time to do this. After the water is frozen solid, fill up again; repeat the process until the barrels are full of solid ice, then roll them into your cellar, cover them up with plenty of sawdust or straw, and your ice crop is safely harvested.

2. A large block of ice has been made in the house itself, by making a frame of boards in the center, and gradually filling it up, so that the water freezes solidly each night. Additions in height are made to the frame as required, and the sawdust is packed around it.

In this way a solid block of ice, ten feet each way, weighing over thirty tons, has been made during the winter by means of a hose from a pump. Such a block of ice wastes very little in the summer.

3. When a supply of water can be had with a little fall, and where there is sufficient cold weather, an ice house can be readily filled with a solid mass of ice at trifling expense. Arrange a pipe so that the water can be thrown out over the floor of the ice house in the form of a fine spray, as from the nose of a watering-pot. This will freeze as it falls, quite rapidly in cold weather, and in a brief time a whole house can be thus filled with a solid mass.

Ice Chest—to make.—A box constructed as follows will answer very well in lieu of an expensive ice-chest: Take two dry-goods boxes, one six inches smaller in each direction than the other. Put one inside the other, and pack the space with some non-conducting material, such as wood, cotton-seed, planing-mill shavings, charcoal, or sawdust. Put slats across the inside box near the top on which to rest the ice, and use a bag of sawdust or any other non conducting matter for a lid. There should be some provision for drainage from the bottom of the box.

An ice box on a small scale for keeping milk cool through the night for children or invalids is easily improvised. Put the milk into a crock and over the top set another crock enough smaller than the first to sink into it an inch or two. Fill the upper crock with ice, cover the top with woolen cloths, and spread a blanket over the whole. If more convenient, the milk may be put into a bottle or any small vessel and set in the crock.

Ice—to compute the quantity.—To compute the number of tons an ice-house will contain, calculate the number of cubic feet in an ice-house, and divide by thirty-five; this gives the number of tons the ice-house will contain if it is closely packed.

Ice Cream.—Have rich, sweet cream and one-half pound loaf sugar to each quart of cream or milk. If you cannot get cream, the best imitation is to boil a soft custard, six eggs to a quart of milk (eggs well beat). Or another is made as follows: Boil one quart of milk, and stir into it while boiling one tablespoonful of arrowroot, wet with cold milk; when cold stir into it the yolk of one egg to give it a rich color. Five minutes boiling is enough for either plan. Put the sugar in after they cool. Keep the same proportion for any amount desired. Or thus: To six quarts milk add one-half pound Oswego cornstarch, first dissolved. Put the starch in one quart of the milk; then mix together and simmer a little (not boil), sweeten and flavor to your taste—excellent. The juice of strawberries or raspberries give a beautiful color and flavor to ice cream; or about one-half ounce essence or extract to one gallon, or to suite the taste. Have your ice well broken —one quart salt to a bucket of ice. About one-half hour's constant stirring, with occasional scraping down and beating together, will freeze it.

Ice Cream (Chicago).—Irish moss soaked in warm water one

hour, and rinsed well to cleanse it of sand and a certain foreign taste; then steep it in milk, keeping it just at the point of boiling or simmering for one hour, or until a rich yellow color is given to the milk; without cream or eggs, from one to one and one-half ounce to a gallon only is necessary, and this will do to steep twice. Sweeten and flavor like other creams.

Ice Cream (Chocolate).—One generous pint of milk, one cupful of sugar, a scant half cupful of flour, two eggs, one quart of cream; make the foundation with two eggs, the sugar, flour, and one pint of milk; boil the milk, beat the eggs and flour together, and stir this into the boiling milk and cook twenty minutes, stirring often. While this is cooking scrape one square of chocolate, add two tablespoonfuls of sugar, and one of boiling water. Stir this over the fire until it is smooth and glossy, then add to the boiling mixture. Set away to cool. When cold add another cup of sugar and the quart of cream. Freeze the same as other ice cream. The foundation can be used for ice cream of any flavor.

Ice Cream (Tea).—Put half an ounce fine orange flavored tea into an earthenware pot and pour on it a pint of boiling milk. Let it stand until nearly cold, then pour it off fine, and if necessary, strain to free it from any particles of leaf. Put the liquor into a large stew-pan, with enough lump sugar to make it sweet. When it is hot add to it a quarter of a pint of rich cream and the yolks of five eggs. Stir over a slow fire until it becomes a thick custard, and then take from the fire; stir occasionally until it is cool, to prevent a skin forming. Freeze in the usual manner.

Icing—for cake.—It is said that if these directions for icing cake are followed, you will have an icing that will neither crumble or break off when the cake is cut. Take the whites of six eggs, one-half pound of sugar, mix well together; then set the mixture on the fire and stir it all the time. As soon as it begins to simmer take it off and beat well till thick, then spread it over the cake.

Imperial Cream Nectar.—1. Take one gallon water, loaf sugar, six pounds; tartaric acid, six ounces; gum arabic, one ounce.

2. Flour, four teaspoonfuls; the whites of five eggs; beat finely together; then add one-half pint of water; when the first part is blood warm, put in the second; boil three minutes, and it is done.

Directions:—Three tablespoonfuls of syrup to two-thirds of a glass of water; add one third teaspoonful of carbonate of soda, made fine; stir well, and drink at your leisure.

Important Rules.—1. A suitable place for everything, and everything in its place.

2. A proper time for everything, and everything done in its time.

3. A distinct name for everything, and everything called by its name.

4. A certain use for everything, and everything put to its use.

Indigestion—relief for.—I have been troubled for years with indigestion, sick headache, and constipation, and have been greatly

helped by dropping all remedies and drinking a coffeecupful of as warm water as can be drank comfortably, the first thing on rising and just before retiring, always on an empty stomach. It will cause an unpleasant feeling at first, but persevere and you will be surprised at the benefit received. If the kidneys are at fault, drink water blood warm.

Incontinence of Urine of Old People.—The continued use of one to six drops tincture of iodine has proved a successful remedy. For other persons, put four drops tincture of aconite root in a tumbler of water, and use a teaspoonful every half hour until relieved.

India Ink Marks—to remove.—There is no method known of removing India ink markings that have been pricked into the skin, save by the process in which they were introduced. The superficial application of any remedy to remove it will be utterly useless. The only method that will prove efficacious, is the painful and tedious one of pricking the skin as was done when the markings were made, and squeezing out the solid particles of coloring matter with the blood. If this be done carefully and thoroughly the marks may be removed; but in no other way can it be done, except by actually cutting out the marked piece of skin.

Infants' Band—to knit.—An infant's band can be knit of soft wool, and knit whole like the leg of a stocking, and can be made so as to slip on over the feet, by knitting it in ribs—that is, two stitches plain and two purl. They will be elastic, and yet firm, and will fit the body closely and comfortably.

Inflamed Eyes—to cure.—For inflamed eyes use borax, half dram; camphor water, three ounces. The above simple prescription is in common use by the highest medical authorities. It is good for inflamed eyes. In using it, lean the head back and drop three drops in the corner of each, and then open the eyes and let it run in. Use it as often as the eyes feel badly.

Infusion of Roses.—Take any common red-rose leaves (cabbage roses are the best), and put them into a china teapot; pour over them boiling water in the proportion of a pint of water to one-half ounce of rose leaves. When the infusion has stood ten minutes, pour it off and leave it to get cold; sweeten with sugar or honey. A wineglassful taken occasionally will be found of service in almost all cases of female debility.

Ink (American Commercial).—Take one-quarter pound extract of logwood, one gallon clean soft water; heat it to the boiling point in a perfectly clean iron kettle; skim well; stir; then add ninety grains of bichromate of potash, fifteen grains prussiate of potash, dissolved in half a pint of hot water. Stir for three minutes; take off and strain.

Ink Stains on Books.—To remove ink stains from a book, first wash the paper with warm water, using a camel's-hair pencil for the purpose. By this means the surface ink is got rid of; the paper must be wetted with a solution of oxalate of potash, or, better still, oxalic acid, in the proportion of one ounce to half a pint of water. The ink

stains will immediately disappear. Finally, again wash the stained place with clean water, and dry it with white blotting paper.

Ink—to take out of boards.—To take ink out of boards use strong muriatic acid, or spirits of salts, applied with a piece of cloth; afterward wash well.

Ink (Common Writing)—to make.—"In the recipes generally given for making ink, it is recommended to boil the ingredients. This is a very serious mistake. It should always be made with cold water. By this latter process, more time is of course necessary to make it; but then the ink is very superior, and entirely free from extractive matter which has no inky quality, and which only tends to clog the pen and to turn the ink ropy and mouldy. Take gall-nuts, broken, one pound; sulphate of iron, half a pound; gum acacia and sugar candy, of each a quarter of a pound; water, three quarts. Place the whole of these ingredients in a vessel where they can be agitated once a day; after standing for a fortnight or three weeks, the ink is ready for use. Logwood and similar materials are often advised to be used in conjunction with the gall-nuts; but they serve no good purpose, unless it be to make a cheaper article, which fades rapidly.

Ink-stains on Table-covers and Carpets—to remove.—Take up as much of the spilled ink as possible with a spoon and blotting-paper; pour cold water on the spot and dry it up with a flannel. If any stain remains, wash the place with a solution of oxalic acid or salt of sorrel; dry it immediately, and, to preserve the color, rub on a little hartshorn.

Ink (Cheap and Good)—how to make.—Take one-quarter of a pound of extract of logwood; one gallon clear, soft water; heat it to the boiling point in a perfectly clean iron kettle; skim well, stir, then add ninety grains of bichromate of potash, fifteen grains prussiate of potash, dissolved in a half pint of hot water; stir well for three minutes; take off and strain. The above will make one gallon of the best ink which I have ever used.

Ink (Indelible)—to remove.—To remove indelible ink, apply a strong solution of cyanide of potassium, and rinse well.

Ink (Gold and Silver)—to make.—Grind gold leaf with white honey on a slab of porphyry or glass, with a muller, until it is reduced to an unpalpable powder in a pasty condition; this golden honey paste is then diffused in water, which dissolves the honey, and the gold falls to the bottom in the form of very fine powder. When the honey is all washed away mix the gold powder with gum arabic mucilage. After using it, allow it to dry on the paper, and then it may be made brilliant by burnishing it with an agate burnisher. Silver ink is prepared in the same way, by using silver leaf.

Ink (Green)—Rub three and a half drams Prussian blue, and three drams of gamboge, with two ounces of mucilage, and add half a pint of water.

Ink-stains—to remove from the hands.—Indexical pumice stone soap will instantly remove ink stains from the hands.

Ink (Indelible Marking)—One and a half drams of nitrate of silver, one ounce of distilled water, half an ounce of strong mucilage of gum arabic, three quarters of a dram of liquid ammonia. Mix the above in a clean glass bottle, cork tightly, and keep in a dark place till dissolved, and ever afterward. Directions for use: Shake the bottle, then dip a clean quill pen in the ink, and write and draw what you require on the article; immediately hold it close to the fire (without scorching), or pass a hot iron over it, and it will become a deep and indelible black, indestructible by either time or acids of any description.

Ink (Indelible)—1. Two-fifths of a pound of tartaric acid are dissolved in sixty-one cubic inches hot water; in one-half of the solution dissolve one-fifth oily anilin; add the other half, and then one-fifth pound chlorate of potassium. Allow the solution to cool and subdue until the next day; filter from the bitartrate, and bring the liquid to the density of seven degrees B. Thicken sufficiently with gum arabic, and add to each cubic inch one twenty-fifth pound copper sulphate, dissolved in a little water. This ink may be at once used for printing muslin and other fabrics, upon which the black color will be perfectly developed by bleaching liquids. Chlorate of copper is also used for writing upon zinc used for signs and labels exposed to the weather.

2. An ink that cannot be erased, even with acids, is obtained by the following recipe; To good gall ink add a strong solution of fine soluble Prussian blue in distilled water. This addition makes the ink, and was previously proof against alkalies, equally proof against acids, and forms a writing fluid which cannot be erased without destruction of the paper. The ink writes greenish blue, but afterward turns black.

3. Dissolve separately one ounce of nitrate of silver, and one and a half ounces of sub-carbonate of soda (best washing soda) in rain water. Mix the solutions, and collect and wash the precipitate in a filter, while still moist, rub it up in a marble or hard wood mortar with three drams of tartaric acid; add two ounces of rain water, mix six drams white sugar, and ten drams of powdered gum arabic, half an ounce of archil and water to make up six ounces in measure.

4. Nitrate of silver, five scruples; gum arabic, two drams; sap green, one scruple; distilled water, one ounce; mix together. Before writing on the article to be marked, apply a little of the following: Carbonate of soda, one-half ounce; distilled water, four ounces; let this last, which is the mordant, get dry, then, with a quill pen, write what you require.

Ink—for writing on linen.—Dissolve nitrate of silver (common caustic) in a glass mortar, and in double its weight of pure water. This forms the ink for marking linen, and it must be kept in a bottle well corked. Before using the ink, the part of the linen to be written upon should be saturated with a preparation made of one dram of salts of tartar dissolved in one and a half ounces of water, and dried

before the fire. The writing should be held to the fire, to bring it up quite black.

Ink (Lithographic).—Venice turpentine, one part; lampblack, two parts; hard tallow soap, six parts; mastic in tears, eight parts; shellac, twelve parts; wax, sixteen parts; melt, stir, and pour it out on a slab.

Ink—ways to remove from linen.—1. To take ink out of linen, dip the ink-spot in pure melted tallow; then wash out the tallow, and the ink will come out with it. This is said to be unfailing.

2. Milk will remove ink from linen or colored muslins, when acids would be ruinous. Soak till the spot is very faint, then rub and rinse in cold water.

3. An inkstand was turned over upon a white tablecloth; a servant threw over it a mixture of salt and pepper plentifully, and all traces of it disappeared.

4. Rub the spot well with the end of a clean mold candle, leaving some of the tallow in lumps upon it for twenty-four hours; then wash the article in boiling water, and the ink will disappear.

5. Take one ounce sal-ammoniac, one ounce salts of tartar, wine-bottle of cold soft water. Well mix the above; wet the linen thoroughly with the mixture, and repeat the process till the spots disappear.

Ink-stains—to remove from mahogany tables and other wood.—1. Dilute half a teaspoonful of oil of vitriol with a large spoonful of water, and carefully touch the ink-spot with a feather; rub it quickly off, and repeat the process till the spot disappears. Spirit of salt will answer the same purpose, and must be used with equal care, for fear of leaving a white mark.

2. Put a few drops of spirits of nitre in a teaspoonful of water, touch the spot with a feather dipped in the mixture, and on the ink disappearing, rub it over immediately with a rag wet in cold water, or there will be a white mark which will not be easily effaced.

Ink-stains from Printed Books.—Procure two cents worth of oxalic acid, which dissolve in a small quantity of warm water; then slightly wet the stain with it, when it will disappear, leaving the leaf uninjured.

Ink (Perpetual).—Pitch, three pounds; melt over the fire, then add lamp-black, one pound; mix well. This is used in a melted state to fill the letters on tombstones, marbles, etc. Without actual violence, it will endure as long as the stone itself.

Ink Powder.—1. Ink powder that will make good black writing-ink by dissolving in cold water, so as to be fit for use in a few hours or less: Tannic acid, seven ounces; sulphate of iron (copperas), one pound; gum arabic, one and one-half pounds; sugar (white), one-fourth of a pound. Powder as finely as possible; rub all together, adding a few drops of clove oil.

2. Reduce to powder ten ounces of gall nuts, three ounces of green copperas, two ounces each of powdered alum and gum arabic. Put

a little of this mixture into white wine, and it will be fit for immediate use.

Ink (Red Writing).—Best ground Brazil wood, four ounces; diluted acetic acid, one pint; alum, one-half ounce. Boil them slowly in a covered tinned copper or enameled saucepan for one hour, and add one ounce of gum.

Ink (Red)—for linen.—Take one-half ounce of vermilion and one dram of salt of steel; let them be levigated with linseed oil to the consistency required.

Ink for Writing on Steel.—Sulphate of copper, water and sulphuric acid. Dissolve sulphate of copper in water, so as to make a liquid like ink; add a little sulphuric acid, and use for writing a quill pen. With this ink copper letters may be formed on iron or steel.

Ink (Sympathetic or Secret).—The solutions used should be so nearly colorless that the writing cannot be seen till the agent is applied to render it visible. Boil oxide of cobalt in acetic acid. If a common salt be added, the writing becomes green when heated; but with nitre it becomes a pale rose color. By using a weak solution of sulphate of copper, the writing becomes blue when exposed to the vapor of ammonia.

Ink Stains—to remove.—1. When fresh done and wet, hasten to provide some cold water, an empty cup and a spoon. Pour a little of the water on the stain, not having touched it previously with anything. The water, of course, dilutes the ink and lessens the mark; then ladle it up into the empty cup. Continue pouring the clean water on the stain and ladling it up, until there is not the slightest mark left. No matter how great the quantity of ink spilled, patience and perseverance will remove every indication of it. To remove a dry ink stain, dip the part stained into hot milk, and gently rub it; repeat until no sign is left. This is an unfailing remedy.

2. Oxalic acid is used for removing ink and rust stains and remnants of mud stains which do not yield to other detergents. It may also be used for destroying the stains of fruits and astringent juices, and old stains of urine. However, its use is limited to white goods, as it attacks fugitive colors, and even light shades of those reputed to be fast. The best method of applying it is to dissolve it in cold or lukewarm water, to let it remain a moment upon the spot, and then to rub it with the fingers.

3. Coal oil will take out ink stains, even after they have been washed with soap. Pour on the oil, and rub the spot in the hands; if it does not remove it by the first application, try more, the second application will remove it entirely.

4. As soon as the accident happens, wet the place with juice of sorrel or lemon, or with vinegar, and the best hard white soap.

Ink (Ticketing)—for grocers' use.—Dissolve one ounce of gum arabic in six ounces of water, and strain; this is the mucilage. For black, use drop black, powdered and ground with the mucilage to extreme fineness; for blue, ultramarine is used in the same manner;

for green, emerald green; for white, flake white; for red, vermilion, lake, or carmine; for yellow, chrome yellow. When ground too thick they are thinned with a little water. Apply with a small brush. The cards may be sized with a thin glue and afterwards varnished, if it is desired to preserve them.

Ink (Invisible)—ways to make.—Put litharge of lead into very strong vinegar, and let it stand twenty-four hours; strain it off, and let it remain till quite settled; then put the liquor in a bottle. Next dissolve orpiment in quicklime-water, by setting the water in the sun for two or three days, turning it five or six times a day. Keep the bottle containing this liquor well corked, as the vapor is highly pernicious if received into the mouth. Write what you wish with a pen dipped in the first liquor, and, to make it visible, expose it to the vapor of the second liquid. If you wish the writing to disappear again, draw a sponge or pencil dipped in aquafortis or spirit of nitre over the paper; and should you wish it to reappear, let the paper be quite dry, after which pass the solution of orpiment over it.

2. The most curious of all kinds of invisible inks is that from cobalt. It is a very remarkable phenomenon that the figures traced out with this ink may be made to disappear and reappear at pleasure. To prepare this ink, take zaffre, and dissolve it in nitro-muriatic acid, till the acid extracts from it the metallic part of the cobalt which communicates to the zaffre its blue color; then dilute the solution, which is very acrid, with common water; if you write with the liquor on paper, the characters will be invisible; but when exposed to a sufficient degree of heat they will become green. When the paper has cooled they will disappear, but by warmth they may be made to appear again. Observe, if the paper be too much heated they will not disapper at all.

Ink (Yellow).—Gamboge triturated with water, and a little alum added.

Ink Stains and Iron Rust—to remove.—Oxalic acid dissolved in water will remove ink stains and iron rust. Articles must be thoroughly rinsed after the stains are removed. The acid should be applied and then the garment laid in the sun. Repeated applications may be necessary.

Ink Spots—to remove.—To remove iron rust or ink spots, moisten the spots and apply salts of lemon until they disappear, and then rinse well. Salts of lemon are made of equal parts of oxalic acid and tartaric acid. Another way is to moisten with lemon juice, sprinkle well with salt, and lay in the sun. If ink is spilled on colored goods that will not bear acids, soak them immediately in sweet milk boiling hot. Hot melted tallow poured through ink spots will also remove them.

Ink Stains—to remove from silver.—The tops and other portions of silver inkstands frequently become deeply discolored with ink, which is difficult to remove by ordinary means. It may, however, be completely eradicated by making a little chloride of lime into a

paste with water, and rubbing it upon the stains. Chloride of lime has been misnamed "The general bleacher," but it is a foul enemy to all metallic surfaces.

Inlaid Mother of Pearl Work.—1. Inlaid mother of pearl work, on sewing machines and other fancy work, is performed by selecting the thin scales of the shell and cementing them to the surface of the material; the rest of the surface is covered with successive coats of japan varnish, generally black, being subjected to a baking process after each application. When the varnish is as thick as the shell, it is polished, the gilding and painting added, and a flowing coat of varnish put over the whole.

2. Prepare the job with a heavy coat of black japan, then, before it is dry, procure flakes of pearl and lay them on the black surface, pressing them into the japan until they are level with the surface; then with colors from vines and flowers, allowing the pearl to form the body of the flower leaf, and shade up all nicely.

Insects on Plants—to destroy.—Insects are a very serious drawback to healthy and vigorous plants, and a most vigilant watch should at all times be set for them ; but, in spite of all our care, they will appear and increase with such rapidity that no time should be lost in destroying them. No plants, however, should be taken into the house until thoroughly cleansed. Cultivated plants seem to furnish food for several different species of insects, and the treatment necessary to destroy one form will not answer for another. The black or green fly, or aphis, are always the most numerous, and are first seen on the new growth of houseplants ; but in an amazingly short time spread to the older leaves, especially to the soft wooded ones, as well as flowers, absorbi ıg the juice and vitality of the plant. It is easy enough to fumigate a greenhouse, to destroy insects, which, of coarse, could not be done in our dwellings, and many plans have been recommended. One says, sprinkle Scotch snuff on the foliage and let it remain two or three days; another says, a weak solution of carbolic acid, applied with a swab or feather; and still another says, take a little coal oil—just enough to make a colored scum on the surface of a tub of water—and dip the inverted plant into it, not allowing the pot to touch it. Others recommended hot water, and we have found that to be the least objectionable. Our plan is to dip the plant in a tub of water that will register one hundred and twenty degrees with a thermometer, repeating it the following day. Of course, the plant must not remain in the hot water, as it would be soon cooked. To destroy the green fly in greenhouses or conservatories, the most approved method is fumigating, which is done by placing on a pan of live coals a quantity of damp tobacco stems, filling the house with a dense smoke and keeping it closed until morning; but, as heliotropes, etc., are liable to be injured by smoke, spread paper over the plants while fumigating. It is better, however, to fumigate two or three nights in succession than to risk too dense smoke. But the most destructive and least known insect is the red spider. It is too small

to be readily seen; but its presence is easily detected by gray or yellowish spots on the apparently dying leaves. The little insect lives upon the under side of the leaf; and not only absorbs its vitality, but weaves a fine web, which closes the pores through which the plant breathes. They delight in a hot, dry atmosphere, just such a one as our sitting-room affords; but are readily destroyed by syringing the plant often with clear, warm water, or a good bath in the tub, and then sprinkle with sulphur. But if small plates of bright tin or glass, with a little sulphur on them, are placed under the plants, in the full rays of the sun, no red spiders will trouble them, as the sulphur fumes kill them. A weak solution of whale oil soap is excellent; but it must be very weak, or it would not only kill the foliage, but the plant also. The mealy bug is also very destructive to hot-house plants; but is really the easiest to exterminate of any in this list. They are a large, white, woolly looking lump in the axil of the leaf, and are easily kept down by frequent syringing with warm, greasy water, to which a little sulphur should be added. But, if full grown, they should be picked off by hand or a small, sharp-pointed stick.

For worms at the roots of plants an application of a weak solution of carbolic acid, applied quite frequently to the earth, is said to be a sure cure. Another good plan to kill them is to use water with lime dissolved in it for watering the plants. It also aids the soil in stimulating the growth. But probably the safest plan is to carefully shake all the earth from the roots, and, after a thorough watering with warm water, repot in fresh earth. But, for fear of a like trouble again in a short time, a good plan is to subject the required amount of earth to a strong heat, by placing it in an old pan in a stove-oven, until all insects as well as eggs are destroyed.

And now we come to the least known, least understood, and apparently the most insignificant insect; but which in reality is the greatest scourge in the whole list. They are the scales (*Coccidæ*), various species, and infest cactus, oleanders, camellias, ficus and tropical ferns. Like all other insects, they increase and spread with great rapidity, covering the woody stem and leaves in a short time; and, as they are so small and so near the color of the plant on which they feed, they usually get a good start before being seen. A weak solution of whale oil soap is the usual remedy; but the best remedy we ever tried is a boy with a pan of warm water and a stiff tooth-brush.

Insects—to destroy.—1. To destroy the little bugs on the oleander, take a piece of lime about the size of a hen's egg, and dissolve it in about two quarts of water. Wash the stock and branches of the tree with this water. Slugs are occasionally seen eating large holes or notches in the leaves of all succulents and begonias. They usually feed during the night. Cut potatoes, turnips, or some other fleshy vegetables in halves, and place conveniently near the plants. The slugs will gather upon the vegetables and are easily destroyed.

2. When bugs have obtained a lodgment in walls or timber, the surest mode of overcoming the nuisance is to putty up every hole

that is moderately large, and oil-paint the whole wall or timber. In bed-furniture, a mixture of soft soap with snuff or arsenic is useful to fill up the holes where the bolts or fastenings are fixed, etc. French polish may be applied to the smoother parts of the wood.

3. Kerosene oil may be used for destroying insects on plants by taking a tablespoonful of oil and mixing it with half a cupful of milk, and then diluting the mixture with two gallons of water. Apply the liquid with a syringe, and afterward rinse with clear water. This substance is death to plant insects, and we have never heard of its injuring the most delicate plants when used as here directed.

Insect Destroyers.—1. Hot alum water is the best insect destroyer known. Put alum into hot water and boil until dissolved, then apply hot water with a brush to all cracks, closets, bedsteads and other places where insects may be found. Ants, bedbugs, cockroaches and other creeping things are killed.

2. It is said that common sulphur will kill or drive away the little fish-shaped, silvery pest which infects our pantry. Sprinkle the sulphur freely about, and the place will soon be cleared of the vermin.

3. A solution of cyanide of potassium is the best poison to kill insects of any kind.

Insect Bites—to cure.—Insect bites, and even that of a rattlesnake, have proved harmless by stirring enough common salt into the yolk of a good egg to make it sufficiently thin for a plaster, to be kept on the bitten part.

Insomnia.—A little English work, "Sleep and How to Obtain it," says that insomnia is not so dangerous as is commonly supposed, for the author knows an eminent man of letters who has suffered from it for many years without injury. When a man begins to dream of his work he may know that he is under too great a mental strain. The author's plan of inducing sleep is to reckon up friends and acquaintances whose name begins with a certain letter.

Intermittent Fever and Salt.—Take a handful of table-salt and roast in a clean oven with moderate heat till it is brown—the color of roasted coffee. Dose for an adult: A spoonful dissolved in a glass of warm water; take at once. When the fever appears at intervals at two, three or four days, the remedy should be taken fasting on the morning of the day following the fever. To overcome the thirst, a very little water should be taken through a straw. During the forty-eight hours which follow the taking of the salt, the appetite should be satisfied with chicken and beef broth only; it is especially necessary to observe a severe diet and avoid taking cold. The remedy is very simple and harmless and has never been known to fail where it has been given trial.

Interest Rules.—For four per cent., multiply the principal by the number of days to run; separate the right hand figure from product, and divide by nine.

For five per cent., multiply by number of days, and divide by seventy-two.

For six per cent., multipy by number of days; separate right hand figure, and divide by six.

For seven and three-tenths per cent., multiply by number of days, and double the amount so obtained. On one hundred dollars the interest is just two cents per day.

For eight per cent., multiply by number of days, and divide by forty-five.

For nine per cent., multiply by number of days; separate right hand figure, and divide by four.

For ten per cent., multiply by number of days, and divide by thirty-six.

For twelve per cent., multiply by number of days; separate right hand figure, and divide by three.

For fifteen per cent., multiply by number of days, and divide by twenty-four.

For eighteen per cent., multiply by number of days; separate right hand figure, and divide by two.

For twenty per cent., multiply by number of days, and divide by eighteen.

Irish Moss for Colds.—Take one ounce of the moss, wash it well twice in boiling water, pour a little cold water on it, and let it stand all night; the next day add to it one quart of fresh milk, a little lemon peel, and two blades of mace; boil all slowly until the milk is thick; put loaf sugar in a basin, and strain the milk on it. It should be stirred while boiling to prevent the moss settling on the bottom of the saucepan.

Iron Holders.—To make excellent iron holders, and at the same time utilize the tops of a pair of worn-out boots, cut the leather into squares and cover two or three thicknesses of it with some suitable material, whipping it closely in place. Over all put a covering of nice white cloth, and as often as necessary remove the outside covering and replace with a fresh one.

Ironing Hints.—If you would lessen the work of ironing fold your clothes the night before, and lay them upon a table piled on one another, covering with an ironing-blanket, and they will be much smoother; sprinkle them in the morning, roll them up tight until you are ready to iron them, and the work will be a pastime. Some washer women, after taking them from the line, throw them into a basket helter-skelter, all crumpled up, wrinkled and harder to iron.

Ironing Directions.—To iron smoothly, purchase a few cents' worth of beeswax, and rub it over the leaves of thin pamphlet, which have been heated through with the flatiron. Keep it with the ironing-sheet and blanket, and when the flatirons are to be used rub them over the wax surface; then wipe gently on a soft cloth. Shirt bosoms can be easily ironed in this manner.

Iron Stains—to remove.—Iron rust can be taken out by wetting the spot, stretching the linen over a plate placed over a basin of boiling water, and touching the place with salts of lemon; keeping

the place very hot. As soon as the stain is removed, wash in a good deal of hot water.

Iron—to make take a bright polish like steel.—Pulverize and dissolve the following articles in one quart of hot water: Blue vitriol, one ounce; borax, one ounce; prussiate of potash, one ounce; charcoal, one ounce; salt, one-half pint; then add one gallon of linseed oil, mix well, bring your iron or steel to the proper heat and cool in the solution.

Iron (Chilled)—to turn.—At Lister's Works some articles required turning in the lathe, and cast steel could not be made hard enough to cut them. One man proposed cast metal tools. He was laughed at, of course, but his plan had to be tried. Well, cast metal tools were tried, with points chilled, and they cut when cast steel tools were of no use. The article was turned up with metal tools.

Iron or Steel—to clean.—Make a paste of two ounces of soft soap and four of emery powder—that is, two ounces of coarse emery powder and two of fine. Put this paste on fire irons, fenders, etc., and afterward rub off with dry wash leather. Some people use crocus powder moistened with sweet oil. This is best for polished steel.

Iron (Cast)—to drill holes in.—By means of carbolic acid a hole one-fourth of an inch in diameter has been drilled through one-half inch thickness of cast iron with a common carpenter's brace; judge, then, what can be done by using the acid and pressure drill.

Iron—for fruit trees.—The scales which fly off from iron being worked at forges, iron trimming, filings, or other ferruginous material, if worked into the soil about fruit trees, or the more minute particles spread thinly on the lawn, mixed with the earth of flower beds or in pots, are most valuable to the peach and pear, and, in fact, supply necessary ingredients to the soil. For colored flowers they heighten the bloom and increase the brilliancy of white or nearly white flowers of all the rose family.

Iron Kettle (New)—to prepare for use.—The best way to prepare a new iron kettle for use is to fill it with clean potato parings; boil them for an hour or more, then wash the kettle with hot water, wipe it dry, and rub it with a little lard; repeat the rubbing for half a dozen times after using. In this way you will prevent rust and all the annoyances liable to occur in the use of a new kettle.

Iron (Malleable)—to soften.—When your furnace is charged with fuel and metal, get the fire up to a dull, red heat, then pour fluoric acid all over the coke; use one-half pint to one pint, or even one quart, adding a handful of fluor spar; it will make the metal much softer.

Irons—to preserve from rust.—Melt fresh mutton suet, and when through ironing, smear the irons over with it while hot; then dust it well with unslaked lime powdered and tied up in muslin. When not used, wrap the irons in baize, and keep them in a dry place. Use no oil on them at any time except salad oil.

Iron Rust from White Goods.—One ounce of oxalic acid dissolved in one quart of water. Wet the iron-rust spots in this solution and lay in the hot sun; the rust will disappear in from three to twenty minutes, according to its depth. I have just experimented by holding a rusted cloth, wet in this solution, over the steam of a boiling teakettle, and the rust disappeared almost instantly. In either case the cloth should be well rinsed in water as soon as the rust disappears, to prevent injury from the acid. Many use this acid to remove fruit and ink stains from white fabrics. When diluted still more, it may be used to remove fruit or ink stains from the hands.

Iron Mold—to remove—Dr. Thompson recommends that the part stained should be remoistened with ink, and this removed by the use of muriatic acid diluted with five or six times its weight of water, when it will be found that the old and new stain will be removed simultaneously.

Iron—to prevent rusting.—Give it a coat of linseed oil and whiting, mixed together in the form of a paste. It is easily removed and will preserve iron from rusting for years.

Iron or Steel—to soften.—Either of the following methods will make iron or steel very soft:

1. Anoint it all over with tallow, temper it in a gentle charcoal fire, and let it cool of itself.
2. Take a little clay, cover your iron with it, temper in a charcoal fire.
3. When the iron or steel is red hot, strew hellebore on it.
4. Quench the iron or steel in the juice or water of common beans.

Iron (Poor)—to improve.—Black oxide of manganese, one part; copperas and common salt, four parts each; dissolve in soft water, and boil till dry; when cool, pulverize, and mix quite freely with nice welding sand. When you have poor iron which you cannot afford to throw away, heat it, and roll it in this mixture; working for a time, reheating, etc., will soon free it from all impurities, which is the cause of its rottenness. By this process you can make good horse nails out of common iron.

Iron (Cast)—to case-harden.—Cast iron may be case-hardened by heating to a red heat, and then rolling it in a composition composed of equal parts of prussiate of potash, sal-ammoniac, and saltpeter, all pulverized and thoroughly mixed. This must be got to every part of the surface; then plunged, while yet hot, into a bath containing two ounces prussiate of potash, and four ounces sal-ammoniac to each gallon of cold water.

Iron (Malleable)—to case-harden.—Put the articles in an iron box, and stratify them among animal carbon—that is, pieces of horns, hoofs, skins, or leather, just sufficiently burned to be reduced to powder. Lute the box with equal parts of sand and clay; then place it in the fire, and keep at a light red heat for a length of time proportioned to the depth of steel required, when the contents of the box are emptied into water.

Iron (Wrought)—to case-harden.—Take prussiate of potash, finely pulverized, and roll the article in it, if its shape admits of it; if not, sprinkle the powder upon it freely, while the iron is hot.

Iron Wire—to tin.—A new process for tinned iron wire consists in first immersing it in a bath of muriatic acid in which a piece of zinc is suspended. After the acid has produced a new surface on the wire, it is placed in communication with a sheet of zinc in a bath of two parts acetic acid in one hundred parts water, to which three parts chloride of tin and three parts soda are added. The wire is allowed to remain two hours in this mixture, after which it may be polished.

Isinglass—to test.—The best isinglass is made from the air-bladders of the sturgeon, and is imported from Russia, where that fish largely abounds. It is a very expensive article, and, on this account, much deception is practiced respecting it. A substance called gelatine, very inferior in point of value, is most frequently substituted for it. To determine the purity of isinglass, place a few threads of it in cold water, a few more in boiling water, and, again, a few in vinegar. In cold water, pure isinglass swells and becomes soft, white, and opaque; gelatine, on the contrary, is transparent and glass-like. In hot water, isinglass is dissolved with little or no residuum; gelatine leaves a considerable deposit. In vinegar, isinglass swells up into a jelly, and all trace of its structure is soon destroyed; while gelatine hardens, and retains its form.

Isinglass Glue.—One ounce of isinglass, gin, or spirits of wine. Dissolve the isinglass near the fire, in the gin or spirits of wine, in a small vial; when required for use to mend broken glass, etc., set the vial in warm water till the contents melt, and apply the glue to the edges of the broken piece with a camel's-hair brush.

Itch—to cure.—To cure a horse affected with itch, first reduce his daily allowance of food, putting him on low diet and then give him a teaspoonful of a mixture of equal parts of sulphur and antimony, and at the end of a week or ten days the sores will have disappeared, and the horse will be covered with a fine coat of new hair.

Ivory (Artificial).—The inventor, Mr. Marquardt, dissolves two pounds of pure rubber in thirty-two pounds of chloroform, and hereupon saturates the solution with a current of ammonia gas. When the rubber has been completely bleached, the admission of the gas is interrupted, and the mass is transferred into a vessel provided with a stirrer, in which it is washed with hot water until the bleaching agent has been entirely removed. During this operation, the temperature may be increased to one hundred and fifty-eight degrees Fahrenheit, in order to evaporate the chloroform, which, by conducting it into an apparatus of condensation, may again be made use of. The remaining product forms a kind of froth, which, being pressed out, dried, and again treated with a small quantity of chloroform, is finally obtained as a consistent paste. The paste is now mixed with a sufficient quantity of finely pulverized phosphate of lime, or carbonate of zinc, until it assumes

the appearance of moist flour. In this condition it is pressed in hot molds, which it leaves sufficiently hard to be turned, planed, filed, and bored. In order to imitate corals, pearls, enamels, hard woods, etc., it is only necessary to mix the paste with the desired colors previously to its being compressed.

Ivory Ornaments—to clean.—To clean ivory ornaments, rub them well with fresh butter—i. e., without salt—and put them in the sunshine. Discolored ivory may be whitened by rubbing it with a paste composed of burned pumice stone and water, and then place it under glass in the sun.

Ivory Etching Fluid.—Take dilute sulphuric acid, dilute muriatic acid, equal parts; mix. For etching varnish take white wax, two parts; tears of mastic, two parts; mix.

Ivory—to gild.—Immerse it in a solution of nitro-muriate of gold, and then expose it to hydrogen gas while damp. Wash it afterward in clean water.

Ivory—to polish.—Remove any scratches or file marks that may be present with finely pulverized pumice stone, moistened with water. Then wash the ivory and polish with prepared chalk, applied moist upon a piece of chamois leather, rubbing quickly.

Ivory—to silver.—Pound a small piece of nitrate of silver in a mortar, add soft water to it, mix them well together, and keep in vial for use. When you wish to silver any article, immerse it in this solution, let it remain till it turns of a deep yellow; then place it in clear water, and expose it to the rays of the sun. If you wish to depicture a figure, name or cipher on your ivory, dip a camel's-hair pencil in the solution, and draw the subject on the ivory. After it has turned a deep yellow, wash it well with water, and place it in the sunshine, occasionally wetting it with pure water. In a short time it will turn of a deep black color, which, if well rubbed, will change to a brilliant silver.

Ivory—to soften.—In three ounces spirits of niter and fifteen ounces of spring water, mixed together, put your ivory to soak, and in three or four days it will obey your fingers.

Ivory—to whiten.—Slake some lime in water, put your ivory in the water, after being decanted from the grounds; boil it till it looks quite white. To polish it afterward, set it in the turner's wheel; and, after having worked, take brushes and pumice-stones, subtle powder, with water, rub it till it looks perfectly smooth. Next to that, heat it by turning it against a piece of linen or sheep-skin leather, and when hot, rub it over with a little dry whiting diluted in oil of olive; then with a little dry whiting alone; finally with a piece of soft white rag. When all this is performed as directed, the ivory will look very white.

Ivory—to bleach.—Take two handfuls of lime, shake it by sprinkling it with water; then add three pints of water, and stir the whole together; let it settle ten minutes, and pour the water into a pan for your purpose. Then take your ivory and steep it in the lime-water

for twenty-four hours, after which, boil it in a strong alum-water one hour, and dry it in the air.

Ivy (English)—treatment of.—The use of the English ivy cannot be too strongly recommended as a decoration in our rooms during the winter season. A lady noted for the beauty and freshness of her ivies was asked the secret of her success, which was simply putting a small piece of beefsteak at the roots of the plants every spring and fall. It is also said that to tightly rub each leaf on both sides with sweet oil will preserve a fresh, vigorous appearance of ivies, in spite of furnace heat and gas, usually so injurious to all house plants. These simple measures are well worth trying.

Ivy Poisoning—cure for.—Bathe the parts affected with sweet spirits of niter. If the blisters are broken so that the niter be allowed to penetrate the cuticle, more than a single application is rarely necessary, and even where it is only applied to the surface of the skin three or four times a day, there is rarely a trace of the poison left next morning.

Jamaica Rum.—Pure spirits, one gallon; one quart of the kind of rum you wish to imitate, one-eighth ounce oil of caraway—is enough for six gallons. Color to suit.

Jam (Raspberry).—Allow a pound of sugar to a pound of fruit, mash the raspberries, and put them, with the sugar, into your preserving kettle. Boil it slowly for an hour, skimming it well. Tie it up with brandy paper. All jams are made in the same manner.

Jars—to cleanse the inside of.—This can be done in a few minutes by filling the jars with hot water (it need not be scalding hot), and then stirring in a teaspoonful or more of baking soda. Shake well, then empty the jar at once, and if any of the former odor remains about it, fill again with water and soda, shake well, and rinse out in cold water.

Jars—covering for.—A good waterproof paper for covering jars used in preserving, etc., may be made by brushing over the paper with boiled linseed oil, and suspending it over a line until dry.

Japanning—for old trays.—First clean the old trays thoroughly with soap and water and a little rotten-stone, then dry them by wiping and exposure at the fire; next get some good copal varnish, mix it with some bronze powder, and apply this with a brush to the denuded parts; after which, set the trays in an oven at a heat of two hundred and twelve degrees or three hundred degrees, until the varnish is dry. Two coats will make old trays equal to new.

Japanese Lacquer.—Japanese lacquer is made as follows: Melt fifty pounds of Naples asphaltum and eight pounds of dark gum anime; boil for about two hours in twelve gallons of linseed oil; add this to the other, and add dryers. Boil for about two hours; or until the mass, when cooled, may be rolled into little pellets. Withdraw the heat, and thin down with thirty gallons of turpentine. During

the boiling the mass must be constantly stirred to prevent boiling over.

Japan Driers (Several).—1. Take linseed oil, one gallon; put into it gum shellac, three-quarters of a pound; litharge and burned Turkey umber, each one-half pound; red lead, one-half pound; sugar of lead, nine ounces. Boil in the oil till all are dissolved, which will require about four hours; remove from the fire, and stir in spirits of turpentine, one gallon, and it is done.

2. Linseed oil, five gallons; add red lead and litharge each, three and a half pounds; raw umber, one and a quarter pounds; sugar of lead and sulphate of zinc, each one-half pound; pulverize all the articles together, and boil in the oil till dissolved; when a little cool, thin with turpentine, six gallons.

3. Linseed oil, four gallons; red lead and umber, of each, eight ounces; sulphate of zinc, four ounces; sugar of lead, four ounces. Boil until it will scorch a feather, when it is ready for use.

4. Nut or linseed oil, one gallon; litharge, twelve ounces; sugar of lead and white vitriol, of each, one ounce; simmer and skim until a pellicle forms; cool, and when settled, decant the clear.

5. Oil, one gallon; litharge, twelve to sixteen ounces; as last.

6. Old nut or linseed oil, one pint; litharge, three ounces; mix. Agitate occasionally for ten days, then decant the clear.

7. Nut oil and water, of each, two pounds; white vitriol, two ounces; boil to dryness.

8. Mix oil with powdered snow or ice, and keep it for two months without thawing.

Jaundice—to cure.—Red iodide of mercury, seven grains; iodide of potassium, nine grains; distilled water, one ounce; mix. Commence by giving six drops three or four times a day, increasing one drop a day until twelve or fifteen drops are given at a dose. Give in a little water, immediately after meals. If it causes a griping sensation in the bowels, and fullness in the head, when you get up to twelve or fifteen drops, go back to six drops, and up again as before.

Javelle Water—to make.—Take two pounds washing soda and two pounds chloride of lime, place them in a hot stone jar, and pour over them two gallons of boiling water, then place over it a thick cloth and a board with a stone upon it. Let it stand twenty-four hours, stirring two or three times. When quite clear, strain it through bed-ticking or thick flannel, rinsing out immediately to save the cloth. Then bottle for future use.

Javelle Water—uses of.—Javelle water is excellent to remove fruit and vegetable stains, and perhaps some others, but avails nothing with ink and iron rust. It is intensely alkaline, and therefore it affects acids principally. A half pint in three or four pails of boiling water will whiten tablecloths beautifully. Any small article that is to be thoroughly treated should be washed and boiled first, then it may be dipped in the javelle water; let it stand three or more minutes, watching it very closely, and removing it the moment the stain

disappears. If there is yet a faint outline of the stain, that will often come out in the subsequent treatment. Do not let the fabric be in more than two minutes, as there is risk of disorganizing it. Then throw it into the hot water; let it stand a few minutes; rinse thoroughly in two or three waters, and hang to dry in the sun. Do not let a drop of it fall upon colored cloth, and if it falls upon any dry cloth, wash out immediately or it may eat a hole. Do not keep the hands in it long, say half an hour, or it will remove the cuticle.

Jelly—(Old-fashioned Apple).—Take twenty large juicy apples, pare and chop; put into a jar with the rind (yellow part) of four large lemons pared thin and cut in bits; cover the jar closely and set in a pot of boiling water; keep the water boiling all around it until the apples are dissolved; strain through a jelly bag, and mix with the liquid the juice of the four lemons; to one pint of mixed juice one pound of sugar; put in the kettle, and when the sugar is melted set it on the fire, and boil and skim about twenty minutes, or until it is a thick, fine jelly.

Jelly—(Crab Apple).—Cut out the eyes and stalks of the apples; halve them and put in a preserving kettle with enough water to prevent burning. Cook until soft; then strain through a sieve, and afterward through a muslin bag; to every pound of juice allow one and one-quarter pounds of sugar. Boil gently for twenty minutes.

Jelly—(Cranberry).—Make a very strong isinglass jelly. When cold, mix it with a double quantity of cranberry juice. Sweeten and boil it up; then strain it into a shape. The sugar must be good loaf, or the jelly will not be clear.

Jellies—without fruit.—To one pint of water put one-fourth of an ounce of alum; boil a minute or two; then add four pounds of white sugar; continue the boiling a little; strain while hot; and, when cold put in half a twenty-five cent bottle of extract of vanilla, strawberry, lemon, or any other flavor you desire for jelly.

Jelly (Lemon).—Isinglass, two ounces; water, one quart; boil; add sugar, one pound; clarify; and, when nearly cold, add the juice of five lemons, and the grated yellow rinds of two oranges and two lemons; mix well, strain off the peel, and put it into glasses or bottles.

Jelly (Hartshorn).—Hartshorn, one pound; water, one gallon; peel off two lemons; boil over a gentle fire till sufficiently thick; strain and add loaf sugar, one-half pound; whites of ten eggs beaten to a froth; juice of six lemons; mix well together, then bottle.

Jelly (Isinglass).—Put four ounces isinglass and two ounces cloves into one gallon water, boil it down to half a gallon; strain it upon four pounds of loaf sugar; add, while cooling a little wine; then bottle.

Jelly (Apple)—from cider.—Take of apple juice, strained, four pounds; sugar, two pounds; boil to a jelly, and bottle.

Jelly (Gooseberry).—Sugar, four pounds; water, two pounds; boil together; it will be nearly solid when cold; to this syrup, add an

equal weight of gooseberry juice; give it a short boil, cool, then pot it.

Jelly (Currant).—Take the juice of red currants, and loaf sugar, equal quantities; boil and stir gently for three hours; put it into glasses; and in three days it will concentrate into a firm jelly.

Jelly (Tapioca).—Wash eight ounces of tapioca well; then soak in one gallon fresh water, five or six hours; add the peels of eight lemons, and set all on to heat; simmer till clear; add the juice of the eight lemons with wine and sugar to taste; then bottle.

Jelly (Blackberry).—This preparation of the blackberry is more agreeable than the jam, as the seeds, though very wholesome, are not agreeable to all. It is made in the same way as currant jelly; but the fruit is so sweet that it only requires half the weight of the juice in sugar.

Jelly (Wine).—Take one pint of water and three ounces isinglass, one and one-fourth sugar, the juice of two lemons, and dissolve that and let it come to a boil, then add wine, brandy and spice to your taste, and strain it through a cotton or flannel cloth and put it in molds to cool.

Jelly (Quince).—Slice the quinces without paring; put into a preserving bottle and just cover with water; put over the fire and boil until soft; remove from the stove and strain off the liquor; to every gallon allow four pounds of white sugar, and boil very fast until it becomes a stiff jelly.

Jellies—to keep from molding.—If the paper which is put over jelly be dipped in the white of an egg, it will when dry be tight and firm, and keep the fruit from molding with much more certainty than if it is dipped in alcohol or brandy. The paper which is laid next the fruit is meant, not that which is tied or pasted over the glass. Jellies should be covered with finely pulverized sugar when put away, to prevent molding.

Jeweler's Rouge—for cleaning plate, jewelry, etc.—Take green vitriol, dissolve it in water; then by degrees add carbonate of soda (used in washing); a powder will fall, which is one kind of rouge. It should be washed in water, and afterward dried. Another kind is made by putting green vitriol in a crucible, and making it red-hot, in which state it may be kept for a quarter of an hour. In the first case, a carbonate of iron will be left; in the last case, an oxide of iron. A small box made of a piece of sheet iron will answer the purpose of a crucible for making the green vitriol red-hot. Great care is requisite in washing. The water should be floated off the powder, so that all grit may be removed, and this operation should be repeated until the powder is perfectly impalpable.

Jewelry (Gilt)—to clean.—Take half a pint of boiling water, or a little less, and put it into a clean oil-flask. To this add one ounce of cyanide of potassium, shake the flask, and the cyanide will dissolve. When the liquid is cold, add half a fluid ounce of liquor ammonia, and one fluid ounce of rectified alcohol. Shake the mixture together,

and it will be ready for use. All kinds of gilt articles, which have become discolored, may be rendered bright by brushing them with the above-mentioned liquid.

Jewelry—to clean.—1. The simplest and best method of cleaning gold jewelry is by washing with tepid water and fine soap, to which a few drops of ammonia has been added. Rinse off with clear water, and lay in fine hard-wood shavings, or dry polish with chamois skin.

2. Wash in soap suds; rinse in diluted alcohol, and lay in a box of dry sawdust to dry. As simple as this seems, it is the very nicest way possible to clean gold chains or ornaments of any kind.

Jockey Club—to make.—Spirits of wine, five gallons, orange-flower water, one gallon, balsam of Peru, four ounces, essence of bergamot, eight ounces, essence of musk, eight ounces, essence of cloves, four ounces, essence of neroli, two ounces; mix thoroughly.

Johnny Cake (Superior).—Two eggs, one-half cup of molasses, one-half cup of sugar, one pint of buttermilk, one-half cup of butter, one teaspoonful of soda, one teaspoonful of salt, one teaspoonful of ground allspice, and make a batter with two-thirds meal and one-third flour. To be eaten warm.

Julep (Mint).—One tablespoonful of white pulverized sugar, two and one-half tablespoonfuls water; mix well with a spoon. Take three or four sprigs of fresh mint, press them well in the sugar and water, add one and one-half wine glasses of Cognac brandy, and fill the glass with shaved ice, then draw out the sprigs of mint, and insert them in the ice with the stems downward, so that the leaves will be above in the shape of a bouquet; arrange berries and small pieces of sliced orange on top in a tasty manner, dash with Jamaica rum, and sprinkle sugar on top. Sip with a glass tube or straw.

Jujubes, or Gum Pastilles.—Ingredients: One pound of picked gum arabic, fourteen ounces of the finest sugar, pounded and sifted, one-half gill of double orange flower water, and one pint tepid water to soak the gum in, which is afterward to be strained off clean. Put the soaked and strained gum into a sugar boiler with the sugar, and use a clean spoon to stir it over a very moderate fire, while it boils and reduces to the small pearl degree; then add the orange flower water; stir all together on the fire; remove the preparation from the stove; skim off the froth, and use the mixture to cast the jujubes in leveled layers of starch powder contained in a flat box.

Jujubes.—Spanish Licorice.—Ingredients: One pound of picked gum arabic, fourteen ounces of sugar, and two ounces Spanish licorice dissolved in a gill of hot water, and afterward strained clean. First prepare the gum and boil it with sugar as directed in the preceding article, and when reduced by boiling to the small pearl degree, incorporate the prepared Spanish licorice with it; remove the scum from the surface, and finish the jujubes in the manner indicated above.

Raspberry.—Ingredients: One pound of picked gum arabic soaked

in one pint of hot water and afterward strained, fourteen ounces of sugar, one gill of filtered raspberry juice, and a few drops of cochineal. Proceed as in the foregoing case, adding the raspberry and coloring last.

BLACK CURRANTS.—Proceed in all respects as indicated for raspberry jujubes, omitting the cochineal, black currant juice being used.

RED CURRANT.—The same as black currant jujubes, red currant juice being used, and a few drops of cochineal.

ORDINARY.—Ingredients: One pound of gum arabic soaked in one pint of hot water and afterward strained, fourteen ounces of sugar, one-half an ounce of essence of roses, and a few drops of prepared cochineal. Let the mixture be prepared as for other jujubes, but instead of casting them in impressions made in starch powder, when the preparation is ready, pour it into a very clean, smooth-tinned baking sheet to the depth of a quarter of an inch, and set it to dry in the screen, or hot closet (moderate heat); when sufficiently dried, so that on pressing the surface it proves somewhat elastic to the touch, remove it from the heat, and allow it to become cold; the sheet of jujube may then be easily detached, and is to be cut up with scissors in the shape of diamonds.

Kalsomining.—Eight pounds of whiting and one-quarter of a pound of white glue make the right proportions. Soak the glue over night in cold water, and in the morning heat it till perfectly dissolved. Mix the whiting with hot water; stir the two thoroughly together, and have the wash of the consistency of thick cream. Apply warm with a kalsomine brush, brushing it well in and finishing as you go on. If warm skim milk is used instead of whiting, the glue may be omitted. Before the wash is applied, all crevices and holes should be stopped with plaster of Paris mixed with water. If it is desirable to tint the walls, colors may be procured at any paint store and stirred into the kalsomine wash. If whitewash has been used upon the wall it must be scraped off before the kalsomine is used.

Kalsomine (Silver Polish).—Take seven pounds of Paris white and a quarter of a pound of light-colored glue. Set the glue in a tin vessel containing three pints of water; let it stand over night to soak; then put it in a kettle of boiling water over the fire, stirring till it is well dissolved and quite thin. Then, after putting the Paris white into a large water pail, pour on hot water and stir till it appears like thick milk. Now mingle the glue liquid with the whiting, stir it thoroughly and apply with a whitewash brush or a large paint brush.

Kathairon (Lyon's).—To eight ounces of eighty per cent. alcohol, colored yellow by a few drops extract of annatto, add two ounces of castor oil, and perfume with a little bergamot.

Kerosene Fires.—It ought to be more generally known that wheat flour is probably the best possible article to throw over a fire caused by the spilling and igniting of kerosene. It ought to be known, because flour is always within convenient reach.

Kerosene Stains—to remove.—Cover kerosene stains with Indian

meal, and when the oil strikes through, remove and put on fresh; repeat this until the oil is removed.

Kettle (Iron) to clean.—Some one asks how to cleanse a new iron kettle. Mine was a source of despair to me until I was advised to boil skim milk in it and then wash in good soap suds. I had my milk man bring me six quarts of skim milk, which I boiled and simmered in my eight-quart kettle for twenty-four hours. The kettle was made smooth and clean, and has given me no trouble since.

Kettles—to clean.—A good way to clean the inside of pots and pans is to fill them with water in which a few ounces of washing soda is dissolved, and set them on the fire. Let the water boil until the inside of the pot looks clean.

Keys—how to fit into locks.—When it is not convenient to take locks apart in the event of keys being lost, stolen, or missing, when you wish to fit a new key, take a lighted match or candle and smoke the new key in the flame, introduce it carefully into the keyhole, press it firmly against the opposing wards of the lock, withdraw it, and the indentations in the smoked part of the key will show you exactly where to file.

Kid Boots—to soften.—Melt a quarter of a pound of tallow, then pour it into a jar, and add to it the same weight of olive oil; stir, and let it stand till cold; apply a small quantity occasionally with a piece of flannel. Should the boots be very dirty, cleanse with warm water. It will soften any leather.

Kid Boots—to clean.—A mixture of oil and ink is good to clean kid boots with; the first softens and the latter blackens them.

Kid Gloves—to clean.—1. Make a strong lather with curd soap and warm water, in which steep a small piece of new flannel. Place the glove on a flat unyielding surface—such as the bottom of a dish—and having thoroughly soaped the flannel (when squeezed from the lather), rub the glove till all dirt be removed, cleaning and resoaping the flannel from time to time. Care must be taken to omit no part of the glove, by turning the fingers, etc. The gloves must be dried in the sun, or before a moderate fire, and will present the appearance of old parchment. When quite dry, they must be gradually pulled out, and will look new.

2. Get of a druggist two ounces of benzine, and a small quantity of powdered soapstone or, as it is called at glove stores, 'Paris glove powder." With a sponge or flannel cloth apply the benzine to the glove (while on the hand) lightly and evenly, and let the glove remain on the hand till dry, (four or five minutes). Pin it up where the sun will shine upon it; and in about half an hour take the glove down, pull it out by taking each finger separately, holding the wrist in one hand. Then apply the glove powder inside and outside, rubbing very hard on the outside. If this be done according to directions, the glove will look as well as new.

Kid Gloves—to restore.—Saturate a piece of cotton cloth with aqua ammonia, wring as dry as possible, and wrap the gloves closely

therein; roll in another dry cloth, and let the gloves then remain for twenty-four hours, at the expiration of which time they should be fully restored. The writer was told to dilute the ammonia with water, but found the solution not sufficiently strong, still I would advise this weakening of the ammonia before trying the full strength.

Kid Gloves—to wash.—Have ready a little new milk in one saucer, and a piece of brown soap in another, and a clean cloth or towel, folded three or four times. On the cloth spread out the glove smooth and neat. Take a piece of flannel, dip it in the milk, then rub off a good quantity of soap to the wet flannel, and commence to rub the gloves downward toward the fingers, holding it firmly with the left hand. Continue this process until the glove, if white, looks of a dingy yellow, though clean; if colored, till it looks dark and spoiled. Lay it to dry, and the operator will soon be gratified to see that the old gloves look nearly new. They will be soft, glossy, smooth, and elastic.

Kid (White)—to color black.—White kid may be easily colored black, purple, or lilac, with a solution of one part extract logwood and three parts brandy. Apply with a sponge and rub until thoroughly dry, and rubbing the hands together so as to soften the gloves.

Kid Slippers (White)—to clean.—To clean white kid slippers wet a piece of Canton flannel in benzine, rub the slipper with it, repeating this until the slipper is clean.

Kindlings—how to make.—To make a handy and cheap kindling, take a quart of tar and three pounds of resin; melt them; then cool, mix as much sawdust, with a little charcoal added, as can be worked in. Spread out on a board, and when cold break up into lumps the size of a large hickorynut, and you will have enough kindling to last a year. They readily ignite with a match, and burn with a strong blaze long enough to kindle any wood that is fit to burn.

King Cakes.—The following is from a cook-book over two hundred years old: "Take a pound of flour, three-quarters of a pound of butter, half a pound of sugar, and half a pound of currants, well cleansed; rub your butter well into your flour, and put in as many yolks of eggs as will lithe them; then put in your sugar, currants, and shred in as much mace as will give them a taste; so make them up in little round cakes, and butter the paper you lay them on."

Kisses.—Five ounces of sugar, three eggs, six ounces of flour, pinch of salt; to be dropped and sugar sprinkled on before baking.

Knickerbocker.—Ingredients: One-quarter pint made-up lemon-water ice, one-half pint of Maderia wine, one pint of iced seltzer water. Mix these together in a china bowl, and drink from glasses. As Maderia is too precious to be wasted, one-half pint of sherry will be found a very good substitute in the present recipe.

Knitted Woolen Shawl—to wash.—Considerable difficulty is often found in washing knitted woolen shawls. The following directions, if strictly attended to, will be found to answer: The shawl should be washed in water a little more than lukewarm, in which a

piece of white soap has been boiled and well mixed. Wash it in two waters, and, in rinsing, use also water a little above lukewarm, so as to keep the pores of the wool open, and discharge all the soap; for, if this is not done, the shawl will become thick and hard. Then, when the shawl is well rinsed, take one and one-half pint of warm water and put to it two tablespoonfuls of dissolved gum arabic, which must be mixed well with the water. Into this gum mixture dip the shawl, squeezing it two or three times in it. Wring it well as it is taken out, and again wring it in a clean linen cloth. Put it out quite square on carpet, or a flat surface, with a clean sheet underneath it, and leave it in this manner till it is thoroughly dry.

Knitting-Aprons.—Quaint knitting-aprons can be made of simple strips of crash, with borders worked in red or blue embroidery cotton, or if you choose to have a motto stamped upon them, it may be worked in outline stitch. A suitable motto would be: "Tossed, and re-tossed, the ball incessant flies.

Knock-Knees—to cure.—A correspondent says: "I commenced the practice of placing a small book between my knees, and tying a handkerchief tight round my ankles. This I did two or three times a day, increasing the substance at every fresh trial, until I could hold a brick with ease breadth-ways. When I first commenced this practice I was as badly knock-kneed as possible; but now I am as straight as any one. I likewise made it a practice of lying on my back in bed, with my legs crossed and my knees fixed tightly together. This, I believe, did me a great deal of good."

Knitting Terms Explained.—To Cast On.—Make a loop in your thread, and place it on the needle in your left hand; when, with your right hand needle, knit this stitch. Repeat this until the desired number of stitches have been made.

To Increase.—If one stitch only is to be increased, bring the thread between the needles and knit the following stitch. This will make an open stitch or hole in the following row. If a close increase is to be made, pick up the loop below the next stitch to be knitted, and knit it. To increase one stitch when the row is being seamed, the thread will be in front of the needle; pass it quite round the needle to the front again.

To Decrease.—If one stitch only is to be decreased, knit two stitches together as one; if two stitches are to be decreased, slip one, knit two together, pass the slipped stitch over the two knit together.

To Fasten On.—Twist the two ends of thread together, and knit a few stitches with both.

To Pick Up a Stitch.—With the left-hand needle pick up the loop below the next stitch to be knitted, knit it, and pass it to the other needle.

To Slip a Stitch, is merely to pass a stitch from the left-hand needle to the right-hand needle, without knitting it.

To Seam a Stitch.—Insert the needle in the stitch to be seamed,

with the point toward you. Pass the thread quite round the needle: take the needle with the thread on it out at the back.

To Narrow, means knit two stitches together.

Explanation of terms.—Narrow means knit two stitches together; t over one, is simply short for thread over once; thus making an extra stitch; t over two, two extra stitches; t over three, three extra stitches, etc.

Knitted Lace (Oceana).—Cast on sixteen stitches, knit across plain.

First Row.—Three plain, t over one, narrow, one over one, narrow, five plain, narrow, t over one, one plain, t over one, one plain.

Second.—Knit back plain.

Third.—Four plain, t over one, narrow, t over one, narrow, three plain, narrow, t over one, three plain, t over one, one plain.

Fourth.—Knit back plain.

Fifth.—Five plain, t over one, narrow, t over one, narrow, one plain, narrow, t over one, five plain, t over one, one plain.

Sixth.—Knit back plain.

Seventh.—Six plain, t over one, narrow, t over one, three stitches together, t over one, narrow, five plain, t over one, one plain.

Eighth.—Knit back plain.

Ninth.—Five plain, t over one, narrow, t over one, narrow two plain, t over one, narrow, five plain, t over one, one plain.

Tenth.—Knit back plain.

Eleventh.—Four plain, t over one, narrow, t over one, narrow, four plain, t over one, narrow, five plain, t over one, one plain.

Twelfth.—Bind off five stitches, fifteen plain.

Knitted Lace (Parisian)—Cast on nine stitches, knit across plain.

First Row.—Slip one, two plain, t over one, narrow, one plain, t over two, narrow, one plain.

Second.—Two plain, knit one loop, seam one loop, three plain, t over one, narrow, one plain.

Third.—Slip one, two plain, t over one, narrow, five plain.

Fourth.—Seven plain, t over one, narrow, one plain.

Fifth.—Slip one, two plain, t over one, narrow, one plain, t over two, narrow, t over two, narrow.

Sixth.—One plain, one loop plain, seam one loop, one plain, one loop plain, seam one loop, three plain, t over one, narrow, one plain.

Seventh.—Slip one, two plain, t over one, narrow, seven plain.

Eighth.—Bind off three, five plain, t over one, narrow, one plain.

Knitting Lace (Normandy).—Cast on fifteen stitches.

First Row.—Knit eight, narrow, thread over, knit three, thread over, knit two.

Second.—Knit two, thread over, knit five, thread over, narrow, knit seven.

Third.—Knit six, narrow, thread over, knit one, narrow, thread

over, knit one, thread over, narrow, knit one, thread over, knit two.

FOURTH.—Knit two, thread over, knit one, narrow, thread over, knit three, thread over, narrow, knit one, thread over, narrow, knit five.

FIFTH.—Knit four, narrow, thread over, knit one, narrow, thread over, knit five, thread over, narrow, knit one, thread over, knit two.

SIXTH.—Knit two, thread over, knit one, narrow, thread over, knit three, thread over, narrow, knit two, thread over, narrow, knit one, thread over, narrow, knit three.

SEVENTH.—Knit five, thread over, narrow, knit one, thread over, narrow, knit three, narrow, thread over, knit one, narrow, thread over, knit one, narrow.

EIGHTH.—Cast off one, knit one, thread over, narrow, knit one, thread over, narrow, knit one, narrow, thread over, knit one, narrow, thread over, knit six.

NINTH.—Knit seven, thread over, narrow, knit one, thread over, slip one, narrow, pass slipped stitch over, thread over, knit one, narrow, thread over, knit six.

TENTH.—Knit two, thread over, narrow, knit three, narrow, thread over, knit eight.

ELEVENTH.—Knit nine, thread over, narrow, knit one, narrow, thread over, knit three.

TWELFTH.—Cast off two, knit one, thread over, knit three together, thread over, knit ten.

This finishes one scallop.

Knit Lace (Raspberry Stitch).—Cast on any number of stitches that will be a multiple of four and add two more; for instance, sixteen and two, or twenty-four and two.

FIRST ROW.—Purl clear across.

SECOND.—Knit first stitch, knit, purl, and knit before slipping the second stitch, making three of one. Purl the next three together, knit, purl and knit the next stitch, making three stitches of one. Purl the next three together, and so repeat through the needle.

THIRD.—Like the first.

FOURTH.—Knit the first, purl the next three together, then knit, purl and knit the next before slipping, making three stitches out of one, etc., thus changing the order with the second row. Remember always to knit the first stitch and change the order of the berries. It makes the pattern very simple.

Knitted Lace—(Wheat-ear Edge).—Cast on five stitches, knit across plain.

FIRST ROW.—Knit two, thread over, knit one, thread over twice, seam two together.

SECOND.—Thread over twice, seam two together, knit four.

THIRD.—Knit three, thread over, knit one, thread over twice, seam two together.

FOURTH.—Thread over twice, seam two together, knit five.

FIFTH.—Knit four, thread over, knit one, thread over twice, seam two together.

SIXTH.—Thread over twice, seam two together, knit six.

SEVENTH.—Knit six, thread over twice, seam two together.

EIGHTH.—Thread over twice, seam five together, knit three.

Knitted Lace (Oak Leaf Edge).—Cast on ten stitches, knit across plain.

FIRST ROW.—Two plain, t over two, seam two together, one plain, t over two, narrow, t over two, narrow, one plain.

SECOND.—Two plain, first loop plain, seam one, loop, one plain, first loop plain, seem one loop, one plain, t over two, seam two together, two plain.

THIRD.—Two plain, t over two, seam two together, three plain, t over two, narrow, t over two, narrow, one plain.

FOURTH.—Two plain, knit one loop, seam one loop, one plain, knit one loop, seam one loop, three plain, t over two, seam two together, two plain.

FIFTH.—Two plain, t over two, seam two together, five plain, t over two, narrow, t over two, narrow, one plain.

SIXTH.—Two plain, knit one loop, seam one loop, one plain, knit one loop, seam one loop, five plain, t over two, seam two together, two plain.

SEVENTH.—Two plain, t over two, seam two together, seven plain, t over two, narrow, t over two, narrow, one plain.

EIGHTH.—Two plain, knit one loop, seam one loop, one plain, knit one loop, seam one loop, seven plain, t over two, seam two together, two plain.

NINTH.—Two plain, t over two, seam two together, fourteen plain.

TENTH.—Bind off till ten stitches remain on needle, five plain, t over two, seam two together, two plain.

Knitted Child's Leggings.—One and one-half ounces single zephyr, any shade. Cast on fifty-six stitches.

FIRST ROW.—Narrow, t over one, one plain, t over one, one plain, slip one, narrow, draw slipped stitch over, one plain, t over one, one plain, t over one, one plain, slip one, knit five stitches together, draw slipped stitch over. Repeat to the end of the row. Just before the last stich in this and every other row, should always be preceded by t over one.

Seam back on the second row and all the other even rows. This pattern makes the top of the legging, and consists altogether of sixteen rows.

Begin at the seventeenth row and knit ten ribs for the leg, narrowing at each end of every other rib until there are forty-five stitches on the needle. Then divide these stitches, fifteen for the instep and fifteen each side of the ankle, taking the last thirty off on bits of silk. Knit two ribs for the instep, and cast off. Then take up the stitches at the side. Cast on eleven for the toe and narrow at the toe and

heel after knitting two ribs on the side of the foot. Sew up the legging.

Knives—to clean.—Take an even portion of fine coal ashes and soda; mix with a little water and rub your knives with the mixture until all stains are removed; wash in tepid water without soap; wipe dry, and your knives will look as bright as new.

Knives (Silver)—care of.—Silver, or silver-plated knives, should be wiped with a damp cloth and thoroughly dried as soon as the meal is over. If left for a half hour or so, they are apt to be stained. Charcoal powder is good for polishing knives without destroying the blades. It is also a good tooth powder when finely pulverized.

Knives—care of.—To keep knives from rusting, scour bright, wipe thoroughly, dry them by the fire, dust fine wood ashes fresh from the stove plentifully over the knives on both sides, leaving those which adhere to the blades, wrap in a piece of cloth and roll up in a paper, taking care to fold the ends of the paper so that the knives are all covered up. Now you may lay them away for a year, and when you look at them you will not find rusty spots on the steel blades.

Knives Not in Use—to keep.—Without great care, knives not in use will soon spoil. They are best kept in a box in which sifted quicklime has been placed, deep enough to admit of the blades being completely plunged into it. The lime must not touch the handles, which should be occasionally exposed to the air to keep them from turning yellow.

Lace (Black)—to clean.—1. Pass the lace through a warm liquor of bullock's gall and water, afterwards rinse in cold water; then take a small piece of glue, pour boiling water upon it, and again pass the lace through it; clap it with your hands, and then frame it to dry.

2. Scald some bran with boiling water, and dip the lace up and down in the bran and water when warm; and when clear, squeeze the water out and shake the bran off. Lay it out, and pull out the edges, etc. Iron it between linen on a blanket, so that the iron does not glaze it. Or if lace is dipped in cold milk, and ironed in the same way, it will be found to clean it equally as well.

Lace (Gold or Silver)—to clean.—Materials: Part of a stale loaf of bread, one-fourth pound powder blue. Rub the bread fine, mix the blue well with it. Lay this plentifully on the lace, and it will soon become bright; then take a piece of flannel and brush the crumbs well off. After this, rub the lace gently with a piece of crimson velvet, and it will look as well as new.

Lace (Black)—to freshen.—Lay it on a clean table, sponge it all over with a weak solution of borax, about a teaspoonful, or less, to a pint of warm water. Use a piece of old black silk, or black kid glove is better, to sponge with. While damp, cover with a piece of black silk or cloth, and iron.

Lace—to wash.—To wash nice lace, baste it closely on a piece of

flannel, securing all the little loops and points. Let it soak for a little while in a suds of pearline or fine soap with a few drops of ammonia, then squeeze it and wash it gently with the hands, and if not thoroughly clean, soak it again in fresh suds. Rinse in two or three waters, and when pretty dry, press on the back of a flannel with a hot iron. By this process the lace will be fully restored, and will look like new.

Lace (Black)—to wash.—Carefully sponge the lace with gin, or, if preferred, with green tea, and wind it round and round a bottle to dry, as, if touched with an iron bolt, it would become glossy and have a flattened appearance. Some persons fill the bottle with warm water, which causes the lace to dry more quickly. It must, on no account, be placed near the fire, as it would loose its color, and have a rusty appearance.

Lace—to wash.—Washing valuable lace should be a labor of love; time and patience are important requisites to do it well, and it comes especially within the province of the gentlewoman who possesses it. A long wooden board, say two yards by one, will be necessary for deep flounces. For smaller pieces, one yard by half a yard will do, but the larger size is preferable, as several pieces can be done on it at the same time. The board must be covered with thick flannel, and slightly stuffed to form a thick cushion. A good supply of fine, long lace pins, with small, round heads, will be required, as well as an ivory punch or an ivory knitting-needle, with a round point, a lobster's claw or a dog's tooth. Before washing, the yellow stains sometimes observable in old lace should be removed by placing the discolored portion on a hot iron, covered with linen moistened with a solution of oxalic acid; the lace should afterward be steeped in lukewarm water. Tepid water expels the starch or stiffening, hot water shrinks the thread, while cold water sets the dirt. Having well-soaked the lace, wash it in a lather of purest white soap and lukewarm water. This must be done with great delicacy of touch, and rubbing must not be attempted; it must be merely dabbed or patted, and pressed between the hands gently to and fro in the water. When the dirt is well out rinse it several times in lukewarm water, and if any stiffness is required pass it through water just sweetened with the finest white sugar candy. In drying, the moisture must be expelled by gentle pressure; hand wringing must never be resorted to for any of the finer kinds of lace.

Lacquer (Japanese).—Japanese lacquer is made as follows: Melt fifty pounds of Naples asphaltum and eight pounds of dark gum anime; boil for about two hours in twelve gallons of linseed oil. Then melt twelve pounds of dark gum amber, and boil it with two gallons of linseed oil; add this to the other, and add dryers. Boil for about two hours, or until the mass, when cooled, may be rolled into little pellets. Withdraw the heat, and thin down with thirty gallons of turpentine. During the boiling the mass must be constantly stirred to prevent boiling over.

Lacquer—for tin.—Put three ounces of seed-lac, two drams of dragon's blood, and one ounce of turmeric powder into a pint of well-rectified spirits. Let the whole remain for fourteen days, but during that time agitate the bottle once a day at least. When properly combined, strain through muslin. It is brushed over tinware which is intended to imitate brass.

Lamb (Roast).—Fry two good slices of pork in your spider till crisp; cut four slices of light stale bread, and chop in your tray with the pork; then put back into the spider with the pork fat; add a cupful of rich milk, a third of it cream if you have it, if not, add a tablespoonful of melted butter with the milk, sprinkle in a little salt, a half teaspoonful of black pepper, and a heaping tablespoonful of powdered sage; mix all well together, and let it stand to soak. If this is not pretty moist, add milk until it is so. Take the upper portion of a hind quarter of lamb, dust it well all over with flour, and sprinkle on salt with sage. Pour water in the dripping pan, and lay in the meat with the outside down, put in prepared dressing as compactly as possible, lay a piece of thin linen over it, set in the oven, and with basting every half hour spread a little butter over as you baste, and bake three hours or more in a good oven; add a little flour, and butter, and seasoning, to the drippings, and serve with your meat.

Lambrequins (for mantle-shelf)—to make.—Buy a piece of heaviest burlap (such as is used for floor mats) half the length of your shelf, divide it through the middle, and sew the ends together; this will form a seam in the center, but when nicely opened and pressed, it does not show. Leave about three inches of it on the edge to ravel for fringe; above this work the Grecian pattern, or a pretty vine, with Germantown wool, and tie some of the wool in with your fringe. Use a narrow, black velvet ribbon to finish the upper edge, and tack to the shelf with gilt-headed tacks. Mine is worked with shaded red, is very pretty, and inexpensive. Another made of invisible green flannel, lined with cambric, is cut in "picket fence points;" a cluster of bright flowers, cut from satin-finished cretonne cloth, is buttonhole stitched on each point, the edges of the points are pinked, and inside of this edge is a row for feather stitching made with old gold floss on every point on the "picket," and the space between the "pickets" is finished with a tassel or ball of silk or worsted.

Lambrequins (Mantel)—to make.—A mantel lambrequin of old gold twine to make the upholstery colorings of a room has red satin ribbon run in and out at intervals perpendiculary. Each end of ribbon is folded to a point and finished with a brass crescent, and a red silk tassel just below. A table lambrequin of pale blue twine has three rows of crushed strawberry red ribbon about an inch wide run horizontally through its openings, and the edge is finished with a thick blue fringe. Oblong ornaments made of crushed strawberry silk and gold tinsel are set at intervals of about four inches all along the heading of the fringe. The top of the table is covered with blue

flannel, covered by a square of crocheted work in blue to match the fringe.

Lambrequin—to make.—If you have a rough, uncouth shelf in your kitchen or sitting-room, first cover the top neatly with some dark, smooth cloth; then take a strip of dark but bright double-faced Canton flannel about eight inches in depth (more or less, according to width or length of shelf), and long enough to reach across the front of the shelf and around at either end; paste a pretty, contrasting stripe of cretonne through the center, and stitch it on with the machine; hem the lower edge of the flannel, and finish with as pretty a worsted fringe as you can afford; bring the upper edge up over the edge of the board and make fast with minute iron tacks, and you will have not only a convenient receptacle for lamps, books, or vases of flowers, but an addition to the furnishing of your room in the shape of a very artistic and eye-pleasing shelf.

Lampas.—This consists in a swelling of the first bar of the upper palate. It is cured by rubbing the swelling two or three times a day with one-half ounce of alum and the same quantity of double refined sugar mixed with a little honey.

Lamp-Burners—to clean.—To clean old lamp-burners, wash them in ashes and water, and they will come out bright as new. Many times a burner is condemned because the light is poor, when having clogged up with sediment, the wick is at fault.

Lamp-Chimneys—to clean.—It is very necessary that the chimneys of lamps be kept clean and bright, otherwise they will greatly interfere with the amount of light. The glass chimney-brush answers its purpose admirably, and, if used daily, and itself kept well cleaned by occasional washing in soda and water, there will be little trouble with the chimneys. Should they, from neglect, become very much stained and spotted, the stains or spots may be removed by soaking them in weak vitriol and water, or by rubbing them gently with the finest sandpaper under water.

Lamp-Chimneys—care of.—After the lamps are filled and the chimneys washed and put on the shelf, take pieces of newspaper and roll in the form of a chimney, and slip over chimney and lamp. It will protect them from dust and flies, and when the lamps are lighted one will be rewarded by finding them as clear and bright as when first put in order.

Lamp-Wicks—to make.—Striped cotton flannel may be used as wicks for kerosene lamps. Make them double, rough side out, sewing the raw edges together. It is well to dip lamp-wicks in strong, hot vinegar, and dry before using. The lamps are less likely to smell disagreeable if this precaution is taken.

Lamps—reflection from.—Never set the lamp upon a red table-cover; if you cannot find time to make a green lamp-mat, put a piece of green cardboard under the lamp, and you will find the reflection upon your work much more agreeable to the eyes than that from the red cover.

Lamps—to prevent smoking.—Soak the wick in strong vinegar, and dry them well before using them. No lamp will smoke with wicks so prepared, unless they are turned up too high.

Lamps—why they explode.—Many things may occur to cause the flame to pass down the wick tube and explode the lamp.

1. A lamp may be standing on a table or mantle, and a slight puff of air from the open window or the sudden opening of a door, cause an explosion.

2. A lamp may be taken quickly from a table or mantle, and instantly explode.

3. A lamp is taken into an entry where there is a draft, or out of doors, and an explosion quickly ensues.

4. A lighted lamp may be taken up a flight of stairs, or is raised quickly to a place on the mantle, resulting in an explosion. In all these cases the mischief is caused by the air movement—either by suddenly checking the draft, or forcing the air down the chimney against the flame.

5. Blowing down the chimney to extinguish the light is frequently the cause of an explosion.

6. Lamp explosions have been caused by using a chimney broken off at the top, or one that has a piece broken out, whereby the draft is rendered variable and the flame unsteady.

7. Sometimes a thoughtless person puts a small-sized wick in a large burner, thus leaving considerable space in the tube along the edges of the wick.

8. An old burner with its air drafts clogged up, which rightfully should be thrown away, is sometimes continued in use, and the final result is an explosion.

Lamps (Kerosene)—to care for.—Only the most ignorant can be so stupid as to pour kerosene upon a fire, and as such persons do not read, it would be a waste of time to caution them against it. Filling a lamp while it is lighted is something that ought never to be done. It can be avoided by always filling the lamp in the morning. This task should belong to some one member of the household, who should have a fixed and regular time for doing it; nothing ought ordinarily to interfere with or cause its postponement. It should be made a duty, to be discharged with all the regularity and punctuality of the daily meals. If good kerosene, of either of the best manufacturers, be used, there is little danger of accident. Glass lamps ought never to be carried about, for the very reason that they are glass. This would hold, no matter what material they contain; even if it be sperm or lard oil, the breaking of a lamp is a disaster to be avoided. There is a chance that the one carrying it may slip or trip, or some other accident cause it to be dropped. With good kerosene, even the breaking the lamp and spilling its contents should cause no disaster in the way of burning; but all kerosene is not good, and the risk should never be taken. In trimming the lamps, only the small portion that is charred need be removed from the wick, and that is read-

ily done by scraping with a knife kept for the purpose. If any substance collects upon the wick tube, that should be scraped off, leaving the brass or metal perfectly clean. After carefully scraping, wipe off the upper part of the wick tube and the wick with a piece of very soft paper, to remove any soft particles left in scraping. A wick may become unfit for use long before it is burned up. Many quarts of oil are carried through a wick, and in time the pores of the fabric become so filled with little particles of dust and other impurities that the oil contains, that its ability to take up the oil as fast as it is burned becomes greatly diminished, and when this occurs, a new wick is needed. If a lamp is filled quite full in a cold room, and then is brought into a warm one, the heat will cause the oil to expand and overflow, and lead to the suspicion that the lamp leaks. This should be avoided by not filling completely; knowing that this may occur sufficient space should be left to allow for the expansion. Kerosene lamps, if kept full, will never explode, as there is then no room in the lamp for the accumulation of explosive gas.

Land Measure.—One acre contains one hundred and sixty square rods, four thousand, eight hundred and forty square yards, forty-three thousand, five hundred and sixty square feet. One rod contains thirty and one-fourth square yards, two hundred and seventy-two and one-fourth square feet. One square yard contains nine square feet.

Laundry Hints.—Washing fluids shorten labor, but the clothes require such thorough rinsing, after their use, that only careful hands should be intrusted with the work.

To wash flannels so as to have them soft and pliable instead of hardened into wooden boards, requires skill on the part of the washer. Science tells that the oil of perspiration remaining in flannels should be removed before soap is applied, or a combination is formed with the soap that hardens the flannel instead of softening it. To remove this oil, soak them, previous to washing, for at least half an hour in soda water, moderately strong. After this they are easily washed and remain soft.

Put all the soap used for flannels in the water. Hot water is best for washing and rinsing. They should be well wrung and shaken before they are hung to dry. Always wash flannels by themselves, for if done in the suds used for cotton clothes, the white fluff of the cotton works into the wool and spoils their appearance. Colored flannels are much used now, blue being recommended to wear next to the skin as most healthy. Where white flannels are preferred, they can be kept nice and white by an occasional bleaching.

This is easily done by fastening ropes across a barrel, near enough to the top to allow the garment to be above it. Put some sulphur into an iron vessel, and after the garments are washed, rinsed, and placed on the ropes, pour some hot coals on the sulphur, and set the barrel down over it, keeping it well covered to retain the flumes. In a half hour or more, take them out and hang them to dry.

When starching dark clothes color the starch with coffee, and they

will be much improved in appearance, as white spots frequently show on the goods where white starch is used. Dark clothes should be turned wrong side out to dry, or hung in the shade, so as to prevent fading the colors.

To give lawns a fresh look, put gum arabic water into the starch, or use it altogether if the lawn is fine. Gum arabic is also excellent for stiffening muslins and laces. After using it a few times the quantity liked can easily be found out. Lace should never be made stiff, however, or it loses its grace and beauty. In washing fine laces, do not rub, but squeeze the water through them. It is better to soak than to rub them. Borax or ammonia water cleans them nicely by soaking the soiled parts for several hours.

Iron laces very lightly on the wrong side, placing them on a thick, soft cloth first. They may be partially dried, pulled into shape, and then pressed under a light weight.

Laundry Blue.—A good washing blue is made as follows: Make a solution of prussiate of potash, two ounces, and another of protosulphate of iron, one ounce. Add the second gradually to the first, until the precipitate almost ceases to fall, then strain through linen; add water, and continue the washing until the blue color begins to dissolve in it, when it may be at once dissolved in distilled water and dried.

Laundry Notes.—If handkerchiefs used in colds are put to soak in borax water for a half hour or more, the phlegm will be removed, and render the washing easy.

Stockings that are stained or troublesome to clean are improved by being stretched out on a board and scrubbed with a hand-brush. Colored stockings ought to be rinsed quickly and well, and opened by pulling them on the hands on each side, and holding them thus until the toe is reached, then letting them fall, and pinning them by the top and side to the line. Woolen stockings are kept from shrinking if dried on a wooden shape of the right size. These are easily made from shingles or thin boards.

To keep flour starch from lumping, mix the flour with water first, then remove the boiling water from the fire for a minute before stirring in the mixture, or it will cook into lumps before it reaches the bottom. It is well to remember this in making gruel, corn-starch, etc.

To set the colors of calico, soak in ox-gall and water, using one tablespoonful of ox-gall to one gallon of water.

A teacup of lye in a bucket of water improves the color of black goods.

To brighten pink or green calicoes, put vinegar in the rinsing water.

Pearl ash answers the same purpose for purple or blue. One teaspoonful of sugar of lead in one quart of water sets blue colors fast. For the latter the articles must be clean.

A strong tea made of common hay is said to preserve the tints of gray-colored linen.

Before beginning to iron, sprinkle the table plentifully with water and lay on the ironing blanket. This will hold it firmly in place and prevent all wrinkling and shoving about. Never try to iron with a blanket having wrinkles or bunches.

Laughing Gas—to inhale.—Procure an oiled or varnished silk bag, or bladder, furnished with a stop-cock, into the mouth, and at the same time hold the nostrils, and the sensation produced will be of a highly pleasing nature; a great propensity to laughter, a rapid flow of vivid ideas, and an unusual fitness for muscular exertion, are the ordinary feelings which it produces. The sensations produced by breathing this gas are not the same in all persons, but they are of an agreeable nature, and not followed by any depression of spirits like those occasioned by fermented liquors.

Lavender Water—to make.—1. Pick the lavender flowers from the stalks, and to every pound put a quart of water in a cold still over a slow fire. Distil very slowly; and when finished, clean out the still, put the lavender water back again, and distil it over again as slowly as before. This is double-distilled lavender water, and should be bottled and well corked till required for use.

2. Best English lavender, four drams; oil of cloves, one-half dram; musk, five grains; best spirits of wine, six ounces; water, one ounce. Mix the oil of lavender with a little spirits first, then add the other ingredients, and let it stand, being kept well corked for at least two months before it is used, shaking it frequently.

3. A cheap and good lavender water may be made by putting three drams of the essential oil of lavender and one dram of oil of ambergris into one pint of spirits of wine, and mixing them by shaking the bottle, which must be kept well corked.

Lead (Black)—to remove.—From polished steel sides of a grate, first wash them with strong soap and water, using old flannel for the purpose; then rub them with sweet oil and rotten-stone; polish in the usual manner with soft leather.

Lead Pipes (Broken)—to join during pressure of water.—It frequently happens that lead pipes get cut or damaged when the water is running at a high pressure, causing much trouble to make repairs, especially if the water cannot be easily turned off. In this case plug both ends of the pipe at the break, place a small piece of broken ice and salt around them. In a few minutes the water in the pipe will freeze; next, withdraw the plugs and insert a new piece of pipe; solder perfectly, thaw the ice, and it will be all right.

Lead Pipes—to repair small leaks in.—Place the point of a dull nail over the leak, give it a gentle tap with a hammer and the flow will cease.

Lead Pipes—to prevent corrosion.—Pass a strong solution of sulphide of potassium and sodium through the inside of the pipe at a temperature of two hundred and twelve degrees, and allow it to re-

main fifteen or twenty minutes. It converts the inside of the pipe into an insoluble sulphide of lead and prevents corrosion.

Leaf Impressions.—Hold oiled paper in the smoke of a lamp, or of pitch, until it becomes coated with the smoke; to this paper apply the leaf of which you wish an impression, having previously warmed it between your hands that it may be pliable. Place the lower surface of the leaf upon the blackened surface of the oiled paper, that the numerous veins that are so prominent on this side may receive from the paper a portion of the smoke. Lay a paper over the leaf, and then press it gently upon the smoked paper with the fingers or with a small roller (covered with woolen cloth or some like soft material), so that every part of the leaf may come in contact with the sooted oil paper. A coating of the smoke will adhere to the leaf. Then remove the leaf carefully, and place the blackened surface on a sheet of white paper not ruled, or in a book prepared for the purpose, covering the leaf with a clean slip of paper, and pressing upon it with the fingers or roller as before. Thus may be obtained the impression of a leaf, showing the perfect outlines, together with an accurate exhibition of the veins which extend in every direction through it more correctly than the finest drawing. And this process is so simple, and the materials so easily obtained, that any person with a little practice to enable him to apply the right quantity of smoke to the oil paper, and give the leaf a proper pressure, can prepare beautiful leaf impressions, such as a naturalist would be proud to possess. There is another, and, we think, a better method of taking leaf impressions than the preceding one. The only difference in the process consists in the use of printing ink instead of smoked oil paper.

Leaf Printing.—After warming the leaf between the hands, apply printing ink by means of a small leather ball containing cotton or some soft substance, or with the end of the finger. The leather ball (and the finger when used for that purpose), after the ink is applied to it, should be pressed several times on a piece of leather or some smooth surface before each application to the leaf, that the ink may be smoothly and evenly applied. After the under surface of the leaf has been sufficiently inked, apply it to the paper where you wish the impression, and, after covering it with a slip of paper, use the hand or roller to press upon it, as described in the former process.

Leaf Plant Skeletons.—The leaves are to be put in an earthen or glass vessel, and a large quantity of rain-water to be poured over them; after this they are to be left to the open air and to the heat of the sun without covering the vessel. When the water evaporates so as to leave the leaves dry, more must be added in its place; the leaves will by this means putrefy, but they require a different time for this; some will be finished in a month, others will require two months or longer, according to the toughness or their parenchyma. When they have been in a state of putrefaction for some time, the two membranes will begin to separate, and the green part of the leaf to be-

come fluid; then the operation of cleaning is to be performed. The leaf is to be put upon a flat, white earthen plate and covered with clear water; and being gently squeezed with the finger, the membranes will begin to open, aud the green substance will come out at the edges; the membranes must be carefully taken off with the finger, and great caution must be used in separating them near the middle rib. When once there is an opening toward this separation, the whole membrane always follows easily; when both membranes are taken off, the skeleton is finished, and it has to be washed clean with water, and then dried between the leaves of a book. Fruits are divested of their pulp and made into skeletons in a different manner. Take, for an instance, a fine large pear which is soft, and not tough; let it be neatly pared without squeezing it, and without injuring the crown or the stalk; put it into a pot of rain-water, covered; set it over the fire, and let it boil gently till perfectly soft, then take it out and lay it in a dish filled with cold water; then holding it by the stalk with one hand, rub off as much of the pulp as you can with the finger and thumb, beginning at the stalk. and rubbing it regularly toward the crown. The fibers are most tender toward the extremities, and are, therefore, to be treated with great care there. When the pulp has thus been cleared pretty well off, the point of a fine penknife may be of use to pick away the pulp sticking to the core. In order to see how the operation advances, the soiled water must be thrown away from time to time, and clean poured on in its place. When the pulp is in this manner perfectly separated, the clean skeleton is to be preserved in spirits of wine. This method may be pursued with the bark of trees, which afford interesting views of their constituent fibers.

Leather—beautiful bronze for.—Dissolve a little of the so-called insoluble aniline violet in a little water, and brush the solution over the leather; after it dries repeat the process.

Leather—to dye yellow.—Picric acid gives a good yellow without any mordant; it must be used in very dilute solution, and not warmer than seventy degrees Fahrenheit, so as not to penetrate the leather.

Leather—to dye green.—Aniline blue modifies picric acid to a fine green. In dying the leather, the temperature of eighty-five degrees Fahrenheit, must never be exceeded.

Leather (Morocco and Sheep)—dyes for.—1. BLUE.—Blue is given by steeping the subject a day in urine and indigo, then boiling it with alum, or it may be given by tempering the indigo with red wine, and washing the skin therewith.

2. Boil elderberries or dwarf-elder, then smear and wash the skins therewith and wring them out; then boil the elderberries as before in a solution of alum water, and wet the skins in the same manner once or twice, dry them, aud they will be very blue.

RED.—Red is given by washing the skin and laying them two hours in gall, then wringing them out, dipping them in a liquor made with

ligustrum, alum, and verdigris, in water, and lastly in the dye made of Brazil wood boiled with lye.

PURPLE.—Purple is given by wetting the skins with a solution of roche alum in warm water, and when dry, again rubbing them with the hand with a decoction of logwood in cold water.

GREEN.—Green is given by smearing the skin with sap-green and alum boiled.

DARK GREEN.—Dark green is given with steel-filings and sal-ammoniac, steeped in wine till soft, then smeared over the skin, which is to be dried in the shade.

YELLOW.—Yellow is given by smearing the skin over with aloes and linseed-oil dissolved and strained, or by infusing in weld.

LIGHT ORANGE.—Orange color is given by smearing it with fustic berries boiled in alum water, or for deep orange, with turmeric.

SKY COLOR.—Sky color is given with indigo steeped in boiling water, and the next morning warmed and smeared over the skin.

Leather—French polish dressing for.—Mix two pints best vinegar with one pint soft water; stir into it a quarter pound of glue, broken up, half a pound logwood chips, one quarter ounce of finely powdered indigo, one-quarter ounce of the best soft soap, one-quarter ounce of isinglass; put the mixture over the fire and let it boil ten minutes or more; then strain, bottle, and cork. When cold, it is fit for use. Apply with a sponge.

Leather—French finish for.—Take a common wooden pailful of scraps (the legs and pates of calf-skins are best), and put a handful each of salt and alum upon them, and let stand three days; then boil until they get a thick paste; in using, you will warm it, and in the first application put a little tallow with it, and for a second time a little soft soap, and use it in the regular way of finishing, and your leather will be soft and pliable, like French leather.

Leather—French patent.—Work into the skin with appropriate tools three or four successive coatings of drying varnish, made by boiling linseed oil with white lead and litharge, in the proportion of one pound of each of the latter to one gallon of the former, and adding a portion of chalk or ochre, each coating being thoroughly dried before the application of the next. Ivory black is then substituted for the chalk or ochre, the varnish thinned with spirits of turpentine, and five additional applications made in the same manner as before, except that it is put on thin and not worked in. The leather is rubbed down with pumice-stone, in powder, and then placed in a room at ninety degrees, out of the way of dust. The last varnish I prepared by boiling half a pound asphaltum with ten pounds of the drying oil used in the first stage of the process, and then stirring five pounds copal varnish and ten pounds of turpentine. It must have one month's age before using it.

Leather—liquid japan for.—Molasses, eight pounds; lampblack, one pound; sweet oil, one pound; gum arabic, one pound; isinglass,

one pound. Mix well in thirty-two pounds of water; apply neat; when cool, add one quart alcohol; an ox's gall will improve it.

Leather Gloves—to stain.—Those pleasing hues of yellow, brown, or tan color, are readily imparted to leather gloves by this simple process: Steep saffron in soft boiling water for twelve hours; then, having sewed up the tops of the gloves, to prevent the dye from staining ihe inside, wet them over with a sponge dipped into the liquid. The quantity of saffron, as well as of water, depends on how much dye may be wanted, and their relative positions on the depth of color required. A common teacup will cantain qbite sufficient in quantity for a single pair of gloves.

Leather—to soften.—The best oil for making boot and harness leather soft and pliable, is castor oil.

Leather—bronzing.—A small amount of so-called insoluble aniline violet is dissolved in a little water, and the solution is brushed over the articles; it will dry quickly, and perhaps may have to be repeated. Shoes that are treated in this way present a beautiful bronze color.

Leather Scraps—to utilize.—First clean the scraps, then soak them in water containing one per cent. of sulphuric acid until the material becomes soft and plastic, then compress into blocks and dry by steam. In order to soften the blocks, one pound of glycerine is added to one hundred pounds of the material; they are then passed through rollers and brought to the proper thickness to be used as inner soles of boots and shoes.

Lemonade (Portable).—Tartaric ac'd, one ounce; white sugar, two pounds; essence of lemon, one-quarter ounce. Powder and keep dry for use. One dessert spoonful will make a glass of lemonade.

Letters or Papers (Old)—to renew.—Boil galls in wine and sponge over the surface. The letters or writings will be as fresh as ever.

Leaves—to fasten to glass.—To fasten forest leaves to glass use a solution of gum arabic. It is at once transparent and adhesive.

Leech-bites—to stop the bleeding of.—A slight pressure with the finger upon the leech-bite, which has been covered with a piece of lint, or cotton-wool will frequently stop the bleeding. If not, apply to the orifice a plaster spread on lint of one part of yellow wax and two parts of olive oil mixed with heat.

Leeches—to make them bite.—It is often a matter of great trouble to make leeches bite. They have a great dislike to certain skins; others they take to immediately. It is always desirable to wash the place with warm water, and wipe it dry before applying the leeches. Some persons have found it a good thing to smear the spot with a very little blood; others recommend that the leeches should first be steeped for a moment or two in weak white wine and water, or pressed with a cloth that has been steeped in wine.

Legal Brevities.—A note dated on Sunday is void. A note obtained by fraud, or from one intoxicated, is void. If a note be lost or stolen, it does not release the maker, he must pay it. An in-

dorser of a note is exempt from liability, if not served with notice of its dishonor within twenty-four hours of its non-payment. A note by a minor is void. Notes bear interest only when so stated. Principals are responsible for their agents. Each individual in partnership is responsible for the whole amount of the debts of the firm. Ignorance of the law excuses no one. It is a fraud to conceal a fraud. It is illegal to compound a felony. The law compels no one to do impossibilities. An agreement without a consideration is void. Signatures in a lead pencil are good in law. A receipt for money is not legally conclusive. The acts of one partner bind all the others. Contracts made on Sunday cannot be enforced. A contract with a minor is void. A contract made with a lunatic is void. Written contracts concerning land must be under seal.

Lemon Extract—to make.—To make lemon extract, use one ounce of oil of lemon, and one pint of alcohol. Mix and filter through carbonate of magnesia.

Lemons—medical qualities of.—A good deal has been said about the healthfulness of lemons. The latest advice is how to use them so that they will do the most good, as follows: Most people know the benfit of lemonade before breakfast, but few know that it is more than doubled by taking another at night also. The way to get the better of the bilious system without blue pills or quinine is to take the juice of one, two or three lemons, as appetite craves, in as much ice water as makes it pleasant to drink without sugar before going to bed. In the morning, on rising, at least half an hour before breakfast, take the juice of one lemon in a goblet of water. This will clear the system of humor and bile with efficiency, without any of the weakening effects of calomel or congress water. People should not irritate the stomach by eating lemons clear; the powerful acid of the juice, which is always most corrosive, invariably produces inflamation after a while, but properly diluted, so that it does not burn or draw the throat, it does its medical work without harm, and, when the stomach is clear of food, has abundant opportunity to work over the system thoroughly, says a medical authority.

Lemon juice—to keep fresh.—Lemon juice is so desirable in cookery, and also so necessary for many medicinal purposes that a supply of it should always be ready at hand. It is not possible at all times to procure fresh lemons, and sometimes they are very dear. Those who study economy in housekeeping will buy lemons when cheap, and keep them according to the directions given, or they will extract the juice and preserve it by the following recipe: Take, when the fruit is plentiful and cheap, any number of lemons you may require; soften them well by rolling them under the hand upon a table; then cut them in half, and with a pair of wooden lemon nippers squeeze out all the juice into a basin; strain it carefully through muslin, so as to get rid of all pulp as well as pips; then bottle the clear juice in very small phials, clean and perfectly dry, and before corking pour about a teaspoonful of sweet oil upon the juice in each bottle to ex-

clude all air. To prevent waste, the phials should be very small, as the juice, though it will keep some time corked up, will not long continue good after the bottle is opened. When required for use, the oil must be first removed by dipping into it pieces of cotton-wool. The peels of the lemons after the juice is extracted, can be boiled in syrup and candied.

Lemon Juice—to preserve.— To every pound of white sugar add the strained juice of four lemons. Grate the rinds and add them to the mixture. Preserve in glass cans. A tablespoonful will make a glass tumblerful of lemonade.

Lemons—to keep.—Lemons may be kept in water for a long time, but they gradually lose flavor. They may also be kept strung together, and hung up in a dry, airy place. They must not touch each other. String them with a fine packing needle through the nib of the lemon.

Lemon Verbena.—In Spain the lemon verbena, which we only cultivate as a scented garden plant, is systematically collected and stored for winter use. With the Spaniards it is said to form one of the finest stomachics and cordials, and is taken either made into a decoction and drank cold with water and sugar as a tonic, or with the morning and evening cup of tea. A sprig of about five or six leaves of the lemon verbena is first put into the cup, and the hot tea poured upon it. By using this, Spanish authorities assert, "you will never suffer from flatulence, never be made nervous or old maidish, never have cholera, diarrhœa or loss of appetite. Besides, the flavor is simply delicious. No one who has once drank their cup of tea with this addition, will ever drink it without a sprig of lemon verbena."

Letters (Secret)—to write.—Put five cents' worth citrate of potassa in an ounce vial of clear, cold water. This forms an invisible fluid. Let it dissolve, and you can use on paper of any color. Use a goose-quill in writing. When you wish the writing to become visible, hold it to a red-hot stove.

Lice on cattle—to destroy.—Pour kerosene into some shallow dish, to the depth of one-eighth of an inch; into this dip the teeth of a card, then card the animal with it, dipping occasionally while carding. Another way: Take one part lard, and one part kerosene, warm the lard enough so that the kerosene can be thoroughly and easily incorporated with it, stir until it cools sufficient to prevent separation. Thoroughly anoint the parts where the lice most congregate, with the mixture. If the first application does not kill the lice within a few days, make a second.

Lice on Hens—remedy for.—A lady who has raised a large number of hens, says that, after vainly trying the recommended remedies for lice, she has hit upon the plan of giving them, once or twice a week, a large loaf of Graham flour, in which a handful of sulphur has been mixed. The hens like it, and are freed from lice and kept healthy through the season.

Life Belts.—An excellent and cheap life belt, for persons proceeding to sea, bathing in dangerous places, or learning to swim, may be thus made: Take a yard and three-quarters of strong jean, double, and divide it into nine compartments. Let there be a space of two inches after each third compartment. Fill the compartments with very fine cuttings of cork, which can be had at any cork-cutting establishment. Work eylet holes at the bottom of each compartment to let the water drain out. Attach a neck-band and waist strings of stout boot web, and sew them on strongly.

Lima Beans—without poles.—A successful result during the past year of an experiment which is not new, was cultivating Lima beans without poles, by simply pinching off the ends as soon as they showed any disposition to vine. This caused the plants to assume the form of a thick-set bush, and they were nearly as productive as when allowed to climb as nature designed.

Lima Beans—with cream.—Put a pint of the shelled beans into just enough boiling salted water to cover them, and boil them tender; then drain off the water; add a cupful of boiling milk (or better, cream), a little piece of butter, pepper and salt. Let the beans simmer a minute in the milk before serving.

Limbs (Frozen)—treatment of.—Frozen limbs should be thawed out slowly. The patient should be placed in a cold room and the limb bathed in ice-water or cloths wrung out in ice-water. When the limb begins to tingle, the bathing must be stopped, and the temperature of the room gradually raised.

Lime—for blasting.—Every one who has slowly added water to a lump of quick-lime, to slake it, has noticed that in combining with water, the lime swells up and becomes much larger than before. This expansion of quick-lime, when in contact with water, is a force exercised through a short distance, but, like the expansion of water in freezing, is almost irresistible. This force has lately been used in the coal mines of England to throw down the coal. To prepare quick-lime for use in blasting, it is first reduced to powder, and then forced into cartridges or cylinders by means of a hydraulic press. A mold two inches across and seven inches long, is filled with powdered lime, and compressed by a hydraulic press of forty-ton power into a solid mass of about four inches long. When these cylinders, or cartridges, have lengthwise grooves cut in them to admit water, they are ready for use. Holes are drilled as for blasting with powder, a cylinder of compressed lime is placed in each, and tamped. A tube is provided for in the tamping, and water, by means of a force pump, is forced through the tube and brought in contact with the lime cartridge. In slaking, the swelling of the lime throws down the coal without any smoke or the liberation of unwholesome gases, and there is no loss of time in getting rid of these. This method of blasting will no doubt find a wider application than for coal mines.

Lime—to burn without a kiln.—Make a pyramidal pile of large limestones, with an arched furnace next the ground for putting in the

fuel, leaving a narrow vent or funnel at the top; now cover the whole pile with earth or turf, in the way that charcoal heaps are covered, and put in the fire. The heat will be more completely diffused through the pile, if the aperture in the top is partially closed. Produces a superior article of lime.

Lime in the Eye—to remove.—Bathe the eye with a little vinegar and water, and carefully remove any little pieces of lime which may be seen, with a feather. If any lime has got entangled in the eyelashes, carefully clear it away with a bit of soft linen soaked in vinegar and water. Violent inflammation is sure to follow; a smart purge must therefore be administered, and in all probability a blister must be applied on the temple, behind the ear, or nape of the neck.

Lime Water—to make.—To one-half pound of unslaked lime add three-quarters of a pint of water; put the lime into an earthen pot, and pour a little of the water upon it, and as the lime slakes, pour the water on by little and little, and stir up with a stick. The water must be added very slowly, otherwise the lime will fly about in all directions, and may break the vessel. In three or four hours' time, when the slaked lime has sunk to the bottom, pour the clear fluid off, and put it in stoppered bottles away from the light.

Lime Water—use of.—If good milk disagrees with a child or grown person, lime water at the rate of three or four tablespoonfuls to the pint, mixed with the milk or taken after it, will usually help digestion and prevent flatulence. Lime water is a simple antacid, and is a little tonic. It often counteracts pain from acid fruits, from "wind in the stomach," and from acids produced by eating candies and other sweets; also "stomach-ache" (indigestion) from overeating of any kind. A tablespoonful for a child of two years old, to a gill or more for an adult, is an ordinary dose, while considerable more will produce no serious injury. A pint of cold water dissolves less than ten grains of lime, and warm water still less. Pure lime water, even though pretty closely corked, soon deteriorates by carbonic acid in the air, which unites with the lime and settles as an insoluble carbonate. To have it always ready and good, and at no cost, put into a tall pint or quart glass bottle of any kind, a gill or so of good lime just slaked with water. Then fill the bottle nearly full of rain or other pure water, and let it stand quietly, corking well. The lime will settle, leaving clear lime water at the top. Pour off gently as wanted, adding more water as needed. Some carbonic acid will enter, but the carbonate will settle, often upon the sides of the bottle, and freshly saturated water remain. The lime should be removed and a new supply put in once a year or so, unless kept very tightly corked.

Linen—how to whiten.—Linen garments which have become yellow from time, may be whitened by being boiled in a lather made of milk and pure white soap, a pound of the latter to a gallon of the former. After the boiling process the linen should be twice rinsed, a little blue being added to the last water used.

Linens (Colored)—how to wash.—Black has become such a necessity for street wear that black linen is resorted to and made up in very striking costumes by fine machine embroidery. Only two kinds of embroidery are fashionably used, ecru and white, and these are employed for the edges of flounces, and ruffling reserved for the trimming of sleeves and basque precisely the same as navy blue linens. Neither blacks nor navy blues should ever be washed at home, unless by an exceptionably good laundress. They should be taken to a French laundry, and if of good quality will then be turned out equal to new. The reckless and lazy soap-and-soda process known as washing by nine-tenths of the Bridgets will ruin any fabric in time, and no color will stand it. Navy-blue linens have lost caste here on that account, and few ladies dare to buy them. To safely wash them no soap should be used, but a couple of potatoes grated into tepid soft water (after having them washed and peeled), into which previously a teaspoonful of ammonia has been put. Wash the linens (black or blue) in this, and rinse them in cold blue water; they will need no starch, and should be dried and ironed on the wrong side. An infusion of hay will keep the natural color in buff linens and bran in brown linens and prints. It also serves like the potato for starch.

Linen (Colored Table)—to wash.—To wash colored table linen use tepid water, with a little powdered borax; wash quickly, using but little soap, and rinse in tepid water containing boiled starch; dry in the shade, and when almost dry, iron,

Linen—to bleach.—Mix common bleaching-powder in the proportion of one pound to a gallon of water; stir it occasionally for three days, let it settle, and pour it off clear. Then make a lye of one pound of soda to one gallon of boiling soft water, in which soak the linen for twelve hours, and boil it half an hour; next soak in the bleaching liquor, made as above; and lastly, wash it in the usual manner. Discolored linen or muslin may be restored by putting a portion of bleaching liquor into the tub wherein the articles are soaking.

Linen—how to gloss.—Inquiry is frequently made respecting the mode of putting a gloss on linen collars and shirt-fronts, like that of new linen. This gloss, or enamel, as it is sometimes called, is produced mainly by friction with a warm iron, and may be put on linen by almost any person. The linen to be glazed receives as much strong starch as it is possible to charge it with, then it is dried. To each pound of starch a piece of sperm or white wax, about the size of a walnut, is usually added. When ready to be ironed, the linen is laid upon the table and moistened very lightly on the surface with a clean wet cloth. It is then ironed in the usual way with a flat-iron, and is ready for the glossing operation. For this purpose a peculiar heavy flat-iron, rounded at the bottom, as bright as a mirror, is used. It is pressed firmly upon the linen and rubbed with much force, and this frictional action puts on the gloss. "Elbow grease" is the principal secret connected with the art of glossing linen.

Linen—glazing for.—Add a teaspoonful of salt and one of finely scraped white soap to a pint of starch.

Linen (Scorched)—to restore.—To restore scorched linen, peel and slice two onions; extract the juice by pounding and squeezing; add to the juice half an ounce of cut fine white soap, two ounces of fuller's earth, and half a pint of vinegar; boil all together. When cool, spread it over the scorched linen and let it dry on; then wash and boil out the linen, and the spots will disappear, unless burned so badly as to break the thread.

Linen—scent for.—Take of damask-rose leaves, one pound; musk, one-half dram; violet leaves, three ounces; mix them, and put them in a bag.

Linen—to remove iron mold from.—Hold the iron mold on the cover of a tankard of boiling water, and rub on the spot a little juice of sorrel and a little salt; and when the cloth has thoroughly imbibed the juice wash it in lye.

Liniment.—No better liniment for bruises on man or beast was ever used than equal parts of laudanum, alchohol, and oil of wormwood. It reduces the swelling rapidly, if inflamed, and removes soreness like a charm. The sooner applied, of course, the better.

Liniment (May-weed).—May-weed blossoms put into alcohol make a superior liniment.

Liniment (Arnica).—Add to one pint of sweet oil, two tablespoonfuls of tincture of arnica; or the leaves may be heated in the oil over a slow fire. Good for wounds, stiff joints, rheumatism, and all injuries.

Liniment (Blistering).—One part Spanish flies, finely powdered; three of lard; and one of yellow resin. Mix the lard and resin together, and add the flies when the other ingredients begin to cool. To render it more active, add one pint of spirits turpentine.

Liniment (English Stable)—very strong.—Oil of spike, aqua-ammonia, and oil of turpentine, each two ounces; sweet oil, and oil of amber, each one and one-half ounce; oil of origanum, one ounce. Mix

Liniment (Mexican Mustang).—Petroleum, olive oil, and carbonate ammonia, each equal parts, and mix.

Liniment (Nerve and Bone).—Beef's gall, one quart; alcohol, one pint; volatile liniment, one pound; spirits of turpentine, one pound; oil origanum, four ounces; aqua ammonia, four ounces; tincture of cayenne, one-half pint; oil of amber three ounces; tincture Spanish flies, six ounces; mix well.

Liniment for Old Sores.—Alcohol, one quart; aqua ammonia, four ounces; oil of origanum, two ounces; camphor gum, two ounces; opium two ounces; gum myrrh, two ounces; common salt, two tablespoons. Mix, and shake occasionally for a week.

Liniment (Good Samaritan).—Take ninety-eight per cent. alcohol, two quarts; and add to it the following articles: Oils of sassafras, hemlock, spirits of turpentine, tincture of cayenne, catechu,

guaiac and laudanum, of each, one ounce; tincture of myrrh, four ounces; oil of origanum, two ounces; oil of wintergreen, one-half ounce; gum camphor, two ounces; and chloroform, one and one-half ounces. This is one of the best applications for internal pains known.

Liniment (Cook's Electro-Magnetic.)—Best alcohol, one gallon; oil of amber, eight ounces; gum camphor, eight ounces; Castile soap, shaved fine, two ounces; beef's gall, four ounces; ammonia, three F.'s strong, twelve ounces; mix, and shake occasionally for twelve hours, and it is fit for use. This will be found a strong and valuable liniment.

Liniment (London).—Take chloroform, olive oil, and aqua ammonia, of each one ounce; acetate of morphia, ten grains. Mix and use as other liniments. Very valuable.

Liniment (Paralytic).—Sulphuric ether, six ounces; alcohol, two ounces; laudanum, one ounce; oil of lavender, one ounce; mix, and cork tightly. In a recent case of paralysis let the whole extent of the numb surface be thoroughly bathed and rubbed with this preparation for several minutes, using the hand, at least three times daily; at the same time take internally twenty drops of the same in a little sweetened water.

Liniment (Rarey's).—Sulphuric ether, four ounces; hartshorn, four ounces, oil of origanum, four ounces; alcohol, four ounces; sweet oil, four ounces. Shake well before using. For sprains on horses, etc., apply by rubbing, and cover with a tight flannel bandage. For headache, rub a little on the temples and apply a bandage wet with the liniment to the forehead.

Liniment—for sprains and bruises.—For strain, sprain, bruise or broken bone in either man or beast, dissolve gum camphor in sweet oil and rub on three times a day with flannel or woolen cloth, wrapping up the wound with the cloth after rubbing it in. I have tried the above and know its value.

Lining Boxes with Babbitt Metal.—To line boxes properly, so as to insure their filling every time, it is necessary to heat the box nearly red-hot, or at least hot enough to melt the metal. Then smoke the shaft where the metal is to be poured upon it. This insures its coming out of the box easily, after it is cold. After smoking the shaft, put it into the box or boxes, and draw some putty around the ends of them, for the purpose of stopping them, taking care not to press upon it, for if you do it will go into the box and fill a place that ought to be filled with metal; and, in the meantime, your metal ought to be heated, and after you have poured it, let the box stand till it is nearly cold; drive out your shaft, and it is done.

Lips (Chapped)—to cure.—Dissolve a lump of beeswax in a small quantity of sweet oil—over a candle—let it cool, and it will be ready for use. Rubbing it warm on the lips two or three times will effect a cure.

Lips (Cracked).—Lips not unfrequently, especially in cold

weather, crack so badly as to resist any of the usual lip salves; and when this is the case, it may be desirable to touch the crack with a little oxide of zinc, which will frequently promote a cure. The oxide may be applied by means of a camels-hair brush.

Lip Salve (Rose).—1. Oil of almonds, three ounces; alkanet, half an ounce. Let them stand together in a warm place until the oil is colored, then strain. Melt one ounce and a half of white wax, and half an ounce of spermaceti with the oil, stir till it begins to thicken, and add twelve drops of attar of roses. 2. White wax, one ounce; almond oil, two ounces; alkanet, one dram. Digest in a warm place till sufficiently colored, strain, and stir in six drops of attar of roses.

Liquid—to make boil without fire.—Having placed in a bottle a small quantity of brass filings; then you will perceive a strong boiling, so that the bottle will appear full, and the phial will become so warm that you cannot touch it without being burned.

Liquors—to clear and fine.—After all the articles used to prepare any kind of liquors are put in, and they do not become perfectly clear, you will draw into a barrel which has but one head or bottom in it, with a faucet near the bottom, and sift into each barrel from one to two ounces pulverized lime, which will cause every impurity to settle, when it can be drawn again and returned to clean barrels or bottles as desired. White wines are generally fined by isinglass in the proportion of one and one-half ounce (dissolved in one and one-half pints of water and thinned with some of the wine) to the hogshead. Red wines are generally fined with the whites of eggs, in the proportion of twelve to eighteen to each pipe; they must be well beaten to a froth, with about one pint of water, and afterward mixed with a little of the wine before adding to the liquor. Rummage well.

Where spirits are mentioned, it signifies high wines rectified and reduced to hydrometer proof. Proof spirits signifies the same thing. Common whisky is much below this proof, but a good substitute may be produced from rectified whisky by depriving it of its taste and odor, by means of a process which renders it suitable for use. The whisky should be of proper strength, and treated as follows (the process destroys the fusil oil, and precipitates the verdigris to the bottom):

To forty gallons whisky add one and one-half pounds unslaked lime, three-fourths of a pound powdered alum, and one-half pint spirits of niter; stir well and let stand twenty-four hours. Then draw off into another cask, avoiding the sediment. It is then fit for use. All oils used must be cut in ninety per cent. alcohol, using one quart alcohol to two ounces oil, and should stand twenty-four hours before using.

Liquors—coloring for.—Take one-half pound white sugar, put it into an iron kettle, moisten a little, let it boil and burn to red, black and thick, remove from the fire, and put in a little hot water to pre-

vent it hardening as it cools. Use this to color any liquors needing color, to your taste, or as near the color of the liquor you imitate as you can. Tincture kino is a good color and one ounce gum to one pint alcohol makes the tincture.

Liquid (Disinfecting).—The following is a substitute for chloride of lime, and possesses this great advantage, that it is not so soon exhausted: Take two tablespoonfuls of kitchen salt (chloride of sodium), two teaspoonfuls of red lead (deutoxide of lead), a large wineglassful of common sulphuric acid, and water. Introduce the solid substances into a bottle with some water, then add the sulphuric acid gradually, gently shaking the bottle at intervals. A portion of the sulphuric acid combines with the red lead, forming a sulphate, which is precipitated; another portion attacks the sodium of the salt, and sets the chlorine at liberty, which is at once dissolved in the water. In order to use the latter, pour it into a saucer offering a sufficiently large surface for evaporation; the chlorine will then be gradually evolved, and disinfect the apartment.

Lobsters—how to select.—Lobsters, recently caught, have always some remains of muscular action in the claws, which may be excited by pressing the eyes with the finger; when this cannot be produced, the lobster must have been too long kept. When boiled, the tail preserves its elasticity if fresh, but loses it as soon as it becomes stale. The heaviest lobsters are the best; when light they are watery and poor. Hen lobster may generally be known by the spawn or by the breadth of the "flap."

Lobster Baked in its Shell.—Boil the lobster. After removing the meat, put it in a saucepan with a quarter of a pint of cream or rich milk, salt, and a dessertspoonful of butter rolled in flour; stir it to keep from oiling; when all the ingredients are well mixed, pour them into the shell and bake in the oven until of a light brown color, then serve hot. Fresh codfish and halibut are both excellent cooked in this manner.

Lobsters' Claws.—When sending lobster or crabs to the table, the claws are not only a neat finish to the dish, but there is much of the best and sweetest meat to be found in them, but not very easily secured. Place some nut crackers on the table to open the claws with and all difficulty is overcome.

Lockjaw—remedies for.—1. The following is said to be a positive cure: Let any one who has an attack of lockjaw take a small quantity of spirits of turpentine, warm it and pour it on the wound, no matter where the wound is or what is its nature. Relief will follow in less than one minute. Turpentine is also a sovereign remedy for croup. Saturate a piece of flannel with it and place on to the throat, chest, and, in severe cases, three to five drops on a lump of sugar, may be taken internally.

2. If any person is threatened with lockjaw from injuries to the arms, legs, or feet, do not wait for a doctor, but put the part injured in the following preparation: Put hot wood ashes into water as warm

as can be borne; if the injured part cannot be put into water, then wet thick folded cloths in the water and apply them to the part as soon as possible, and at the same time bathe the back-bone from the neck down with some laxative stimulant—say cayenne pepper and water, or mustard and water (good vinegar is better than water); it should be as hot as the patient can bear it. Don't hesitate; go to work and do it, and don't stop until the jaws will come open. No person need die of lockjaw if these directions are followed.

3. Take a red-hot coal from the fire and pour sweet oil (olive oil) on it; then hold the wounded part over the thick smoke, as near as possible without burning. It will be necessary to repeat the operation two or three times a day. This remedy has been known to cure after jaws had commenced to get stiff.

Logs and Planks—to prevent from splitting.—Logs and planks split at the ends because the exposed surface dries faster than the inside. Saturate muriatic acid with lime, and apply like whitewash to the ends. The chloride of colcium formed attracts moisture from the air, and prevents the splitting.

Looking-glass—to clean.—1. Remove, with a damp sponge, fly-stains and other soils (the sponge may be dampened with water or spirits of wine). After this, dust the surface with the finest sifted whiting or powder-blue, and polish it with a silk handkerchief or soft cloth. Snuff of candle, if quite free from grease, is an excellent polish for a looking-glass.

2. Remove all fly stains and dirt by breathing on them and rubbing with a soft rag, then tie up some powder-blue in a piece of thick flannel, and with this carefully polish the whole surface.

Lotion—for burns, cuts, etc.—For the cure of burns, cuts, sores and boils, take of jimpson weed flowers, mullein flowers and bark of the common elder, about a handful of each. Boil these together; strain, then add four ounces beeswax and four ounces mutton tallow. Boil it down, then take it off, and when nearly cool add one ounce gum camphor, and one tablespoonful of spirits of turpentine.

Lounge Cover.—A lovely lounge cover or coverlet for an invalid can be made of cast-off neckties, old bonnet pieces and scraps of silk. Cut the pattern of a hexagon, five inches from the center to the outer edge. Put a center of black silk on velvet about two inches in diameter, and piece around this in log-cabin style, preserving the form throughout. Twelve will make a very good-sized coverlet. Put together with squares of black silk or velvet, and lined with bright flannel pinked on the edges, so that it projects a little on the right side. Wool pieces make a very pretty one, too.

Lubricators—ways to make.—1. India rubber, four pounds, dissolved in spirits of turpentine; common soda, ten pounds; glue, one pound; water, ten gallons, oil, ten gallons. Dissolve the soda and glue in the water by heat, then add the oil, and lastly, the dissolved rubber.

2. *To Lessen Friction in Machinery.*—Grind together black lead

with four times its weight of lard or tallow. Camphor is sometimes added, seven pounds to the hundred weight.

3. *Anti-Friction Grease.*—Tallow, one hundred pounds; palm oil, seventy pounds; boil together when cooled to eighty degrees, strain through a sieve, and mix with twenty-eight pounds soda, and one and one-half gallons of water. For winter take twenty-five pounds more oil in place of the tallow.

4. *Booth's Railway Axle Grease.*—Water, one gallon; clean tallow, three pounds; palm oil, six pounds; common soda, one-half pound, or tallow, two pounds, palm oil, ten pounds. Heat to about two hundred and twelve degrees, and stir well until it cools at seventy degrees.

5. *Drill Lubricator.*—For wrought iron, use one pound soft soap mixed with one gallon of boiling water. It insures good work and clean cutting.

Lumber—facts about.—That drying lumber does not season it, and seasoning lumber is not drying it. That any amount of common air drying does not necessarily, if ever, produce a thorough shrinkage, even though the time be a hundred years. That time has nothing to do with either seasoning shrinking or drying, but is alone the result of condition and heat. That lumber may be thoroughly seasoned without being either dried or shrunk. That lumber may be made as dry as desired, and yet not be seasoned at all, and with only a partial or very slight shrinkage. That common air never seasons lumber, though it dries it, and can never more than partially shrink the wood. That seasoning, shrinking and drying are each separate and distinct operations, and in most cases do not depend upon each other. That they are all necessary, though not in the same degree. That the order of their value to the wood is in the order named; the seasoning being of the greatest, and the drying of the least value.

Lungs—to ascertain the state of.—Draw in as much breath as you conveniently can, then count as long as possible in a slow and audible voice without drawing in more breath. The number of seconds must be carefully noted. In a consumptive the time does not exceed ten, and is frequently less than six seconds; in pleurisy and pneumonia it ranges from nine to four seconds. When the lungs are sound the time will range as high as from twenty to thirty-five seconds. To expand the lungs, go into the air, stand erect, throw back the head and shoulders, and draw in the air through the nostrils as much as possible. After having then filled the lungs, raise your arms, still extended, and suck in the air. When you have thus forced the arms backward, with the chest open, change the process by which you draw in your breath, till the lungs are emptied. Go through the process several times a day, and it will enlarge the chest, give the lungs better play, and serve very much to ward off consumption.

Lunch Basket.—Take any shaped basket desired, lay a piece of paper on the outside and cut a pattern off it; then cut of dark blue cloth and transfer cretonne flowers by button-hole-stitching the edges.

Fasten the cloth on the basket, and finish the edges with a full ruching of satin ribbon. The handle has loops of the ribbon on the upper side, and finished at the sides with full bows. Through the center of the plaited ribbon sew a fine gilt cord.

Lungs—to protect from dust.—In farm labor one has often to encounter a hurtful amount of dust. A simple and cheap protection from such an annoyance is to get a piece of sponge large enough to cover the nostrils and mouth, hollow it out on one side with a pair of scissors to fit the face, attach a string to each side, and tie it on. First wet it well, and squeeze out most of the water. Repeat this whenever the sponge becomes dry. All the dust will be caught in the damp cavities, and it is easily washed out.

Macaroni—to cook.—Break it into inch pieces, put into a sauce-pan, cover with cold water and a dessertspoonful of salt. Let it cook slowly till soft, then take a dish, such as you would scallop oysters in, butter it well, then put in a layer of macaroni, and next a layer of grated cheese. Fill your dish, covering the top with cheese. It will bear considerable salt. Then fill up with milk and what liquor was left in the sauce-pan.

Macaroni with Broth.—Put half a pound of macaroni, boiled and washed in cold water, over a fire with any kind of broth, or one pint of cold gravy and water, season it to taste with pepper and salt, and let it heat slowly for an hour, or less if you are in a hurry; then lay it on a flat dish, and strew over it a few bread-crumbs; then set it in the oven, or in front of the fire, to brown. It is delicious and very hearty.

Macaroni (Italian).—Take one-fourth pound macaroni, boil it in water until tender; thicken one-half pint milk with two tablespoonfuls flour; add two tablespoonfuls cream, one-half tablespoonful mustard, a little white pepper, and salt; stir in this one-half pound grated cheese; boil all together a few minutes; add the macaroni; boil ten minutes. This is the mode adopted at the best tables in Florence.

Macaroni—nutritious for invalids.—Stew the macaroni in water until quite soft, and drain it on the back of a sieve. Have ready a very strong gravy stock of ox-heel, or calves' feet, place the macaroni in it, stew them together for twenty minutes, and serve up.

Macaroni—with tomato sauce.—Sauce: Put butter, the size of an egg, into a sauce-pan; when it is at the boiling point throw in an onion (minced), two sprigs of parsley, chopped fine, and a little pepper. Let it cook five or eight minutes longer. Now pour in a coffee-cup of tomatoes which have been stewed and strained through a colandar; stir all together. Boil your macaroni in salt water until tender; put in a layer of macaroni, in a baking dish, pour over sauce and again macaroni, and have sauce on the top; set in a moderate oven for three minutes. Serve immediately.

Macaroni—with white sauce.—Warm half a pound of macaroni boiled and washed in cold water, in the following sauce, and use it as soon as it is hot: Stir together over the fire one ounce each of butter

and flour, pouring in one pint of boiling water and milk as soon as the butter and flour are mixed. Season it with salt and pepper to taste, and put the macaroni into it. This dish is very good and wholesome.

Macaroni—proper way to cook.—I took the pains to get an authentic recipe for cooking macaroni, and for all who wish a most delicious, easy and cheap dish, I write it: Take three pints of beef soup, clear, and put one pound of macaroni in it, and boil fifteen minutes, with a little salt; then take up the macaroni—which should have absorbed nearly all the liquid—and put it on a flat plate, and sprinkle grated cheese over it thickly, and pour over all plentifully a sauce made of tomatoes, well boiled, strained, and seasoned with salt and pepper. Some people prefer to only put the cheese on it, but I prefer it with the tomato as well. If anybody don't like that when it is done, it is because they don't know what is good.

Macaroons—(Hickorynut).—Make frosting as for cake; stir in enough pounded hickorynut meats, with mixed ground spice to taste, to make convenient to handle. Flour the hands and form the mixture into little balls. Place on buttered tins, allowing room to spread and bake in a quick oven.

Mackerel—how to select.—Mackerel must be perfectly fresh, or it is a very indifferent fish; it will neither bear carriage, nor being kept many hours out of the water. The firmness of the flesh and the clearness of the eyes, must be the criterion of fresh mackerel, as they are of all other fish.

Mackerel—to preserve for months.—Mackerel, being at certain times exceedingly plentiful, may be preserved to make an excellent and well-flavored dish, weeks or months after the season is past, by the following means: Having chosen fine fish, cleaned them perfectly, and either boiled them or lightly fried them in oil, the fish should be divided, and the bones, heads, and skins being removed, they should then be well rubbed over with the following seasoning: For every dozen good-sized fish, it will be requisite to use three tablespoonfuls of salt (heaped), one ounce and a half of common black pepper, six or eight cloves, and a little mace, finely powdered, and as much nutmeg, grated, as the operator chooses to afford, not, however, exceeding one nutmeg. Let the whole surface be well covered with the seasoning; then lay the fish in layers, packed into a stone jar (not a glazed one); cover the whole with pretty good vinegar, and, if it be intended to be long kept, pour salad oil or melted suet over the top. N. B.—The glazing on earthen jars is made from lead or arsenic, from which vinegar draws forth poison.

Madeira Shell Boats.—These are pretty for Christmas trees, and please the little ones. Take half a shell, glue a slender mast in, and put in a sail of gilt or silver paper. They will sail nicely.

Magnetic Pain Killer.—Laudanum, one dram; gum camphor, four drams; oil of cloves, one-half dram; oil of lavender, one dram; add then to one ounce alcohol, six drams sulphuric ether, and five

fluid drams chloroform. Apply with lint, or for toothache rub on the gums, and upon the face against the teeth.

Mahogany—to give a rich color to.—Ingredients: One pint of cold-drawn linseed oil, ten cents worth of alkanetroot, and five cents worth of rose-pink. Put these ingredients into an earthen basin, stir them well, and leave them one night; then, having washed the furniture perfectly clean with vinegar, and removed all stains, cover it lightly with the above, on a soft rag. Leave it for some hours; then polish off with linen cloths.

Mahogany—to remove stains from.—Ingredients: Six parts of spirits of salts, one part of salts of lemon. Mix them and keep them in a bottle, corked. When required for use, drop a little of the mixture on the stains, and rub them until they disappear.

Mahogany—to remove hot-water marks.—The whitish stain left on a mahogany table by a jug of boiling water, or a very hot dish, may be removed by rubbing in oil, and afterward pouring a little spirits of wine on the spot and rubbing it dry with a soft cloth

Manure from Bones.—Take one hundred pounds of bones, broken into as small fragments as possible; pack them in a tight cask or box with one hundred pounds of good wood ashes. Mix with the ashes, before packing, twenty-five pounds of slaked lime and twelve pounds of sal-soda, powdered fine. It will require about twenty gallons of water to saturate the mass, and more may and should be added from time to time to maintain moisture. In two or three weeks, it is asserted, the bones will be broken down completely, and the whole may be turned out upon a floor and mixed with two bushels of dry peat or good soil; and, after drying, it is fit for use. It has been recommended to pour onto this mass dilute sulphuric acid to aid decomposition and prevent the escape of ammonia.

Another method is to take a kettle holding a barrel or more; fill with bones; pour caustic lye over to cover them. A gentle fire is built for two or three successive days, to barely warm the liquid through. In a week the bones will become softened. Mix the mass with three loads of muck, afterward adding the leached ashes, from which the lye was obtained. Let the whole remain, in order to decompose the muck, and apply.

Manure—to compost.—Mixing manure or fertilizers is laborious work, and if nothing is gained by it, it is labor lost. But something may be gained by it when the condition of the material can be changed for the better, and at the same time something may be lost when anything can be changed for the worse. In composting, for instance, such raw substances as swamp muck, leaves, tannery wastes, with manure, or in mixing various manures, as from the horse stable, cow sheds, pig-pens, and poultry house, valuable results may be obtained; while in mixing lime or wood ashes with manure, and especially in mixing the common fertilizer with poultry manure and wood ashes, harm may be done and valuable fertilizing matter may be wasted. In the one case the more actively fermenting horse or pig manure

will serve to decompose more readily the colder cow manure, and to produce decomposition in the abundant litter or raw matter that may have been used. Besides, when the whole manure heap has been reduced to an even and homogenous condition and quality, it is made more valuable for use in the field, and neither unduly or wastefully enriches one portion of it while inadequately fertilizing another portion. It is, therefore, a judicious and useful practice to mix these manures or these substances in the heap, either in the yard or the field, and so add considerably to the value of a part without detracting from the value of other portions. But in the other case much harm may be done by mixing any substances in the heap which may exert an injurious action upon the others. This may happen when lime or wood ashes are mixed with the manure or with the poultry manure; and the more harm is done, the richer in ammonia the manure may be. Lime and potash are alkalies, and when fresh are in a caustic condition—that is, they are free from carbonic acid, which, when combined with an alkali, renders it neutral, or mild and inert. When fresh lime or wood ashes are mixed with manure they at once seek to combine with carbonic acid, from whatever source they can procure it. Ammonia is an alkali, and in manure is generally in combination with carbonic acid as carbonate of ammonia. The lime or wood ashes takes the carbonic acid from this carbonate of ammonia, and the ammonia escapes as gas into the air, and so far as the owner of the manure is concerned this ammonia is lost, and as ammonia is the most valuable and costly fertilizing element in existence, the loss is very serious. It is easy, however, to avoid this loss by using the lime or the ashes by themselves on the soil, and not with the manure directly, in which way they will do as much good.

But sometimes it is advisable to mix lime or wood ashes in a compost heap, and this may be done safely when the special behavior of these three indispensable substances are understood. If the manure is quite fresh there is very little ammonia in it, and if there is more, a large proportion of absorbent matter, as swamp muck in the heap will absorb and hold it, and carbonic acid will be produced by its decomposition in sufficient quantity to saturate the alkali of the lime or ashes or to take up the ammonia as fast as it is formed or set free. In fact, a farmer who understands the chemical decompositions and combinations which go on in a heap of decaying manure or compost may use lime and wood ashes with safety and advantage. With regard to the common mixture of ashes, hen manure, and plaster, this may be safely and beneficially made at the time it is to be used, but not if it is to remain mixed for any considerable time previously.

Manure (Barn)—substitute for.—Dissolve a bushel of salt in water enough to slake five or six bushels of lime. The best rule for preparing the compost heat is, one bushel of this lime to one load of swamp muck, intimately mixed; though three bushels to five loads make a very good manure. In laying up the heap, let the layer of muck and lime be thin, so that decomposition may be more rapid and complete.

When lime cannot be got, use unleached ashes—three or four bushels to a cord of muck. In a month or six weeks, overhaul and work over the heap, when it will be ready for use. Sprinkle the salt water on the lime as the heap goes up.

Manure—from fish, refuse, etc.—The fish owes its fertilizing value to the animal matter and bone-earth which it contains. The former is precisely similar to flesh or blood, consisting of twenty-five per cent. of fibrin, the rest being water, and their bones are similar in composition to those of terrestrial animals. As fertilizing agents, therefore, the bodies of fishes will act nearly in the same way as the bodies and blood of animals; one hundred pounds, in decaying, produce two and a half pounds of ammonia. Hence four hundred pounds of fish rotted in compost are enough for an acre. The great effect is due to the ammoniacal portion; for it renders the herbage dark green, and starts it very rapidly. One of the best composts is made as follows: Dried bog-earth, loam, or peat, seven barrels; hard-wood ashes, two barrels; fish, one barrel; slaked lime, one bushel. Place a thick layer of the bog-earth on the bottom; on the top of this put a layer of the fish, then a sprinkling of lime, then a layer of ashes; on top of the ashes put a thick layer of bog-earth, loam, or peat; then another thin layer of fish, lime, and ashes, and so on till your materials are worked in; then top off with a thick layer of the absorbents, to retain the fertilizing gases. The decomposition of the fish will proceed very rapidly, and a very rich compost will be the result. It should be shoveled over and over and thoroughly intermixed and pulverized. Put this on so as to have four hundred pounds of fish to the acre. It may be applied with the greatest benefit to corn, turnips, potatoes, beans, etc., in the drill, and broad cast on the grass.

Superphosphate can be made from pogy-chum, or the refuse of other fish, after the oil is expressed, by dissolving in sulphuric acid, and afterward mixing with dry loam, precisely as directed for making superphosphate with bones. Whale oil or the oil of any fish, when made into a compost with loam, and a little lime or wood ashes, yields a very powerful manure, merely mixed with absorbent earth and applied at the end of the month. Impure whale oil, at the rate of forty gallons per acre, has produced a crop of twenty-three and a quarter tons of turnips per acre; while on the same soil, and during the same season, it took forty bushels of bone-dust to produce only twenty-two tons per acre.

Manure—how to double the usual quantity on the farm.—Provide a good supply of black swamp mold or loam from the woods, within easy reach of your stable, and place a layer of this, one foot thick, under each horse, with litter as usual on the top of the loam or mold. Remove the droppings of the animals every day, but let the loam remain for two weeks, then remove it, mixing it with the other manure, and replace with fresh mold. By this simple means any farmer can double not only the quantity but also the quality of his

manure, and never feel himself one penny the poorer by the trouble or expense incurred, while the fertilizing value of the ingredients absorbed and saved by the loam can scarcely be estimated.

Josiah Quincy, Jr., has been very successful in keeping cattle in stables the year through, and feeding them by means of soiling. The amount of manure thus made had enabled him to improve the fertility of a poor farm of one hundred acres, so that in twenty years the hay crop had increased from twenty to three hundred tons. The cattle are kept in a well-arranged stable, and are let out into the yard an hour or two mornings and afternoons; but they generally appear glad to return to their quarters. By this process, one acre enables him to support three or four cows. They are fed on grass, green oats, corn fodder, barley, etc., which are sown at intervals through the spring and summer months, to be cut as required; but he remarks that his most valuable crop is his manure crop. Each cow produces three and a half cords of solid, and three cords of liquid manure, or six and a half cords in all. Five to eight miles from Boston, such manure is worth from five to eight dollars a cord. From this estimate, he has come to the conclusion that a cow's manure may be made as valuable as her milk.

Manure for Almost Nothing.—If you have any dead animal—say, for instance, the body of a dead horse—do not suffer it to pollute the atmosphere by drawing it away to the woods or any other out-of-the-way place, but remove it a short distance only from your premises, and put down four or five loads of muck or sods, place the carcass thereon, and sprinkle it over with quick-lime, and cover over immediately with sods or mold sufficient to make, with what had been previously added, twenty good wagonloads, and you will have within twelve months a pile of manure worth twenty dollars for any crop you choose to put it upon. Use a proportionate quantity of mold for smaller animals, but never less than twenty good wagonloads for a horse ; and if any dogs manifest too great a regard for the inclosed carcas, shoot them on the spot.

Manifold Paper.—A process by which several letters can be written at one time. It is commonly known as copying paper. Mix lard with black lead or lamp-black into a stiff paste, rub it over tissue paper with flannel, and wipe off the superfluous quantity with a soft rag. These sheets alternated with black carbon paper, and written with a hard pencil, will produce several copies of a letter at once.

Manuscripts—when almost illegible, to renovate.—Wash them lightly and carefully with a very weak solution of ferro-cyanide of potash in clean water.

Maple (Curled)—to imitate.—Prepare a light yellow for the ground, by mixing chrome yellow and white lead, tinged with Venetian red. The graining color is a mixture of equal portions of raw sienna and Vandyke, ground in ale; spread the surface to be grained in an even manner; then with a piece of cork rub across the work to

and fro, to form the grains which run across the wood. When dry, varnish.

Maple (Curled)—in oil for outside work.—Prepare a rich ground by mixing chrome yellow, white lead and burned sienna. For the graining color, grind equal parts of raw sienna and umber with a little burned copperas in turpentine, and mix with a small quantity of grainer's cream. Thin the color with boiled oil; then fill a tool and spread the surface even, and rub out the lights with the sharp edge of a piece of buff leather, which must now and then be wiped to keep it clean; soften the edges of the work very lightly, and when dry, put on the top grain with burned umber and raw sienna, ground in ale, with the white of an egg beat into it. When dry, varnish.

Maple (Bird's Eye)—to imitate.—The ground is a light buff, prepared with blue lead, chrome yellow, and a little vermillion or English Venetian red, to take off the rawness of the yellow. The graining color is equal parts of raw umber and sienna ground in oil to the proper consistency. Spread the surface of the work with this color, and, having some of the same prepared a little thicker, immediately take a sash tool or sponge, and put on the dark shades, and soften with the badger's-hair brush before the color is dry, put on the eyes by dabbing the dotting machine on the work. When dry; put on the grain with the camel's-hair pencil on the prominent parts, to imitate the small hearts of the wood. When dry, varnish.

Marble—to imitate black and gold.—This description of marble is now in great demand. The ground is a deep jet black, or a dead color, in gold size, drop black and turps; second coat, black japan. Commence veining; mix white and yellow ochre with a small quantity of vermillion to give a gold tinge; dip the pencil in this color, and dab on the ground with great freedom some large patches, from which small threads must be drawn in various directions. In the deepest parts of the black, a white vein is sometimes seen running with a great number of small veins attached to it; but care must be taken that these threads are connected with, and run in some degree in the same direction with the thicker veins. If durability is not an object and the work is required in a short time, it may be executed very quick in distemper colors, and, when varnished, it will look well.

Marble (Blue and Gold).—For the ground put on a light blue; then lake blue, with a small piece of white lead and some dark common blue, and dab on the ground in patches, leaving portions of the ground to shine between; then blend the edges together with duster or softener; afterward draw on some white veins in every direction, leaving large open spaces to be filled up with a pale yellow or gold-paint; finish with some fine white running threads, and a coat of varnish at last.

Marble—to clean.—It is said that marble may be cleaned by mixing up a quantity of the strongest soap lye with quick-lime, to the consistency of milk, and laying it on the marble for twenty-four

hours. Clean it afterwards with soap and water. Or else use the following: Take two parts of common soda, one part of pumice-stone and one part of powdered chalk; sift through a very fine sieve, and mix with water. Then rub it well all over the marble, and the stains will be removed. Then wash with soap and water as before, and it will be as clean as it was at first.

Marble—to clean.—1. Brush the dust off the dish to be cleaned, then apply with a brush a good coat of gum arabic, about the consistency of a thick office mucilage, expose it to the sun or dry wind, or both. In a short time it will crack and peel off. If all the gum should not peel off, wash it with clean water and a clean cloth. Of course, if the first application does not have the desired effect, it should be applied again.

2. Make a paste with soft soap and whiting. Wash the marble first with it, and then leave a coat of the paste upon it for two or three days. Afterward wash off with warm (not hot) water and soap.

3. Chalk, in fine powder, one part; pumice, one part; common soda, two parts. Mix. Wash the spots with this powder, mixed with a little water, then clean the whole of the stone, and wash off with soap and water.

Marble—to remove dirt and stains from.—A solution of gum arabic will remove dirt and stains from marble. Let it remain till it dries, when it will peel off or can be washed off.

Marble—to cut and polish.—The marble saw is a thin plate of soft iron, continually supplied, during its sawing motion, with water and the sharpest sand. The sawing of moderate pieces is performed by hand; that of large slabs is most economically done by a proper mill. The first substance used in the polishing process is the sharpest sand, which must be worked with till the surface becomes perfectly flat. Then a second and even a third sand, of increasing fineness, is to be applied. The next substance is emery, of progressive degrees of fineness; after which, tripoli is employed; and the last polish is given with tin putty. The body with which the sand is rubbed upon the marble is usually a plate of iron; but, for the subsequent process, a plate of lead is used, with fine sand and emery. The polishing-rubbers are coarse linen cloths, or bagging, wedged tight into an iron plaining tool. In every step of the operation, a constant trickling supply of water is required.

Marble—powerful cement for.—Take one pound of gum arabic, make into a thick mucilage; add to it powdered plaster of Paris, one and one-half pound; sifted quicklime, five ounces; mix well; heat the marble, and apply the mixture.

Marble—seven colors for staining.—It is necessary to heat the marble hot, but not so hot as to injure it, the proper heat being that at which the colors nearly boil.

BLUE.—Alkaline indigo dye, or turnsole with alkali.

RED.—Dragon's blood in spirits of wine.

YELLOW.—Gamboge in spirits of wine.

GOLD COLOR.—Sal-ammoniac, sulphate of zinc, and verdigris, equal parts.

GREEN.—Sap green in spirits of potash.

BROWN.—Tincture of logwood.

CRIMSON.—Alkanet root in turpentine.

Marble may be veined according to taste. To stain marble well is a difficult operation.

Marble (Jasper).—Put on a white ground lightly tinged with blue; then put on patches of rich reds or rose pink, leaving spaces of the white grounds; then partly cover those spaces with various browns to form fossils, in places running veins; then put in a few spots of white in the center of some of the red patches, and leave in places masses nearly all white. When dry, use the clearest varnish.

Marble Mantelpieces—to clean.—There is great art in cleaning properly a marble mantelpiece. It must be washed with soap and warm water. If there are any stains, mix two ounces of powdered pumice-stone with two ounces of powdered chalk and a quarter of a pound of soda. Sift these; then make them into a paste with cold water. Rub the marble with the paste, and afterward wash it with soap and water.

Marble and Glass—to polish.—Marble of any kind, alabaster, and hard stone, or glass, may be repolished by rubbing it with a linen cloth dressed with oxide of tin (sold under the name of putty powder). For this purpose, a couple or more folds of linen should be fastened tight over a piece of wood, flat or otherwise, according to the form of the stone. To repolish a mantelpiece, it should be first perfectly clean. This is best done by making a paste of lime, soda and water, wetting well the marble, and applying the paste. Then let it remain for a day or so, keeping it moist during the interval. When this paste has been removed the polishing may begin. Chips in the marble should be rubbed out first with emery and water. At every stage of polishing, the linen and putty powder must be kept constantly wet. Glass, such as jewelers' show counter-cases, which become scratched, may be polished in the same way.

Marble (To)—books or paper.—Provide a wooden trough two inches deep and the length and width of any desired sheet, boil in a brass or copper pan any quantity of linseed and water until a thick mucilage is formed; strain it into the trough, and let cool; then grind on a marble slab any of the following colors in small beer:

BLUE.—Prussian blue or indigo.

RED.—Rose-pink, vermilion, or drop lake.

YELLOW.—King's yellow, yellow ochre, etc.

WHITE.—Flake white.

BLACK.—Burned ivory or lampblack.

BROWN.—Umber, burned do; terra di sienna, burned do.

BLACK.—Mixed with yellow or red; also makes brown.

GREEN.—Blue and yellow mixed.

ORANGE.—Red and yellow mixed.

PURPLE.—Red and blue mixed.

For each color you must have two cups, one for the color after grinding, the other to mix it with ox-gall, which must be used to thin the colors at discretion. If too much gall is used, the colors will spread; when they keep their place on the surface of the trough, when moved with a quill, they are fit for use. All things in readiness, the colors are successively sprinkled on the surface of the mucilage in the trough with a brush, and are waved or drawn about with a quill or a stick, according to taste. When the design is just formed, the book, tied tightly between cutting boards of the same size is lightly pressed with its edge on the surface of the liquid pattern, and then withdrawn and dried. The covers may be marbled in the same way, only letting the liquid colors run over them. In marbling paper the sides of the paper is gently applied to the colors in the trough. The film of color in the trough may be as thin as possible, and if any remains after the marbling it may be taken off by applying paper to it before you prepare for marbling again. To diversify the effects, colors are often mixed with a little sweet oil before sprinkling them on, by which means a light halo or circle appears around each spot.

Marble—to gild letters on.—Apply first a coating of size and then several successive coats of size thickened with finely powdered whiting until a good face is produced. Let each coat become dry and rub it down with fine glass paper before applying the next. Then go over it thinly and evenly with gold size and apply the gold leaf, burnishing with agate; several coats of leaf will be required to give a good effect.

Marble—to extract oil from.—Soft soap, one part; fuller's earth, two parts; potash, one part; boiling water to mix. Lay it on the spots of grease, and let it remain for a few hours.

Marble—to imitate.—For white marble, get up a pure white ground, then hold a lighted candle near the surface, and allow the smoke to form the shades and various tints desired. This will make a very handsome imitation. Black marble imitation is made by streaking a black surface with colors, using a feather and pencil. Another plan is to get up a smooth black surface; then take the colors, green, yellow, red, white, etc., ground thick in gold size, and streak the surface with a stick or pencil. Allow it to dry, and apply a heavy coat of lampblack and yellow ochre, mixed with rough stuff. When all is hard, rub down to a level surface with a lump of pumice-stone, varnish, and a beautiful variegated marble will be the result.

Marking Ink—to take out of linen.—A saturated solution of cyanuret of potassium, applied with a camel's-hair brush. After the marking ink disappears, the linen should be well washed in cold water.

Marmalade (Pear).—To six pounds of small pears, take four pounds of sugar; put the pears into a saucepan with a little cold water; cover it, and set it over the fire until the fruit is soft, then put them into

cold water; pare, quarter, and core them; put to them three teacups of water; set them over the fire; roll the sugar fine, mash the fruit fine and smooth, put the sugar to it, stir it well together until it is thick like jelly, then put it in tumblers, or jars, and when cold secure it as jelly.

Marmalade (Scotch).—Take of the juice of Seville oranges, two pints; yellow honey, two pounds. Boil to a proper consistence.

Marsh Mallows.—Dissolve one-half pound of gum arabic in one pint of water, strain and add one-half pound of fine sugar, and place over the fire, stirring constantly until the syrup is dissolved and all of the consistency of honey. Add gradually the whites of four eggs well beaten. Stir the mixture until it becomes somewhat thin and does not adhere to the finger. Flavor to taste and pour into a tin slightly dusted with powdered starch, and when cool divide into small squares.

Mats (Braided).—Braided mats are easily made, and are very durable. The strips of cloth should be all of one size when rolled together for braiding, the thin pieces wide, and the thick ones narrow. The braiding should be firm and even, sewed with best carpet thread, and the stitches hidden beneath the folds of cloth, that the thread may not wear off. If braided with five strands instead of three, less sewing is required.

Mat (Foot)—to make.—Cut woolen and flannel pieces of cloth into strips three inches long and half an inch wide. Get a pair of very coarse steel knitting needles and some jute twine—no other will answer—the same that is used in making gunny-sacks, and can always be obtained where they are made, if not at the shops. Set up fifteen stitches on the needles, and knit once across; knit the first stitch on the second row, and between the needles put a piece of the cloth at right angles with the stitch, and knit another stitch; then turn the end of the cloth that points toward you out between the needles, so that the ends will be even, and so on clear across, two stitches to every piece of cloth; then knit across again plain to get back to the side where you began. The ends of the cloth must always point from you as you knit them in.

I knit one for my phaeton one yard in length and five strips wide, sewed together with jute, over and over stitch. They are very warm for the feet and are very pretty, and it is a good way to use up discarded coats, vests and pants. The cloth must not be too thick; broadcloth, waterproof, ladies' cloth, etc., are the best for the purpose. Mine is really very pretty; the center is orange and black mixed waterproof and a border of black, brightened up with tufts of scarlet flannel.

Mats (Husk)—to make.—A good respectable-looking husk mat is not an unsightly looking object, and I wish all housekeepers knew what a world of scrubbing and wiping of floors it saved, that they might have one. One bushel basket and a boiler full of husks is sufficient to braid a large mat. If you have boys or girls, it will be fun

for them to braid one in the evening; but, if like myself, you have neither, it would pay you to take the time and do it yourself. Have ready a teakettle full of hot water and turn into the boiler of husks. Begin a common three-strand braid, and as you bring over a strand place about three husks on; leave the large ends of the husks up. When enough is braided for a mat, sew firmly with twine in any shape you choose—long, round or oval. Then sprinkle warm water on the upper side. Run a fork through the husks, splintering the ends into a mass of little, curly fibers. Then, with the shears, trim off evenly. This can all be done in one evening by a good worker. I braid enough in the fall to last the year round.

Matches (Approved Friction).—About the best know preparation for friction matches is gum arabic, sixteen parts by weight; phosphorus, nine parts; niter, fourteen parts; peroxyde of manganese, in powder, sixteen parts. The gum is first made into a mucilage with water, then the manganese, then the phosphorus, and the whole is heated to about one hundred and thirty degrees Fahrenheit. When the phosphorus is melted the niter is added, and the whole is thoroughly stirred until the mass is a uniform paste. The wooden matches prepared first with sulphur are then dipped in this and afterward dried in the air. Friction papers, for carrying in the pocket, may be made in the same manner, and by adding benzoin to the mucilage they will have an agreeable odor when ignited.

Matches (Japanese Paper).—When lighted, burn with a small, scarcely luminous flame, a red-hot ball of glowing saline matter accumulating as the combustion proceeds. When about one-half of the match has been consumed the glowing heat begins to send forth a succession of splendid sparks. The phenomenon gradually assumes the character of a brilliant scintillation, very similar to that observed on burning a steel spring in oxygen, only much more delicate, the individual sparks branching out in beautiful dendritic ramifications. A mixture of carbon, one part, (powdered wood charcoal); sulphur, one and one-half parts; and niter, three and one-fourth parts, produce the phenomenon. English tissue paper may be used for the wrapper.

Mead (Sparkling)—very superior.—Ingredients: Fourteen pounds of honey, three eggs, a small bunch of marjoram, the same of balm, and the same of sweetbriar, one-half ounce of cinnamon, one-half ounce of cloves, one-half ounce of bruised ginger, one-fourth of a pint of yeast, a bottle of white hermitage or moselle; six gallons of water. Set the water to boil; when quite hot, stir in the honey, and then immediately the three eggs, slightly beaten up. Put the herbs together into a muslin bag, and the spices into another bag, and when the liquor with the honey and eggs has boiled half an hour, put in these two bags with their contents, and boil again for a quarter of an hour. After this pour out the liquor into an open tub to cool, take out the bags, and set it to work in the usual way by spreading the yeast on pieces of toasted bread and floating them on the surface.

After being left twenty-four hours, the toasts must be removed, and the liquor put into the cask. Now add the moselle or hermitage when fermentation has ceased, bung the cask closely. After a month bottle it, and wire down the corks.

Mead (Sarsaparilla).—One pound of Spanish sarsaparilla, boil five hours and strain off two gallons; add sugar sixteen pounds and tartaric acid ten ounces, half a wine glass of syrup to half pint tumbler of water, and half teaspoonful of soda is a fair proportion for a drink.

Measles—treatment.—Measles are an acute inflammation of the skin, internal and external, combined with an infectious fever.

Symptoms.—Chills, succeded by great heat, languor, and drowsiness, pains in the head, back, and limbs, quick pulse, soreness of throat, thirst, nausea and vomiting, a dry cough, and high colored urine. These symptons increase in violence for four days. The eyes are inflamed and weak, and the nose pours forth a watery secretion, with frequent sneezing. There is considerable inflammation in the larynx, windpipe, and bronchial tubes, with soreness of the breast and hoarseness. About the fourth day the skin is covered with a breaking out which produces heat and itching, and is red in spots, upon the face first, gradually spreading over the whole body. It goes off in the same way, from the face first and then from the body, and the hoarseness and other symptoms decline with it; at last the outside skin peels off in scales.

Treatment.—In a mild form, nothing is required but a light diet, slightly acid drinks, and flax seed or slippery elm tea. Warm herb teas, and frequent sponge baths with tepid water, serve to allay the fever; care should be taken not to let the patient take cold. If the fever is very high, and prevents the rash coming out, a slight dose of salts, or a nauseating dose of ipecac, lobelia, or hive syrup should be given, and followed by teaspoonful doses of compound tincture of Virginia snake-root until the fever is allayed. If the patient from any derangement takes on a low typhoid type of fever, and the rash does not come out until the seventh day, and is then of a dark and livid color, tonics and stimulants must be given, and the expectoration promoted by some suitable remedy. The room should be kept dark to protect the inflamed eyes. As long as the fever remains the patient should be kept in bed. Exposure may cause pneumonia, which, in other words, is acute inflammation of the lungs. Keep in the room as long as the cough lasts. There is always danger of the lungs being left in an inflamed state after the measels, unless the greatest care is taken not to suffer the patient to take cold. Should there be much pain, and a severe cough, this must be treated as a separate disease, with other remedies.

Medicines—terms used to express their properties.—Absorbents are medicines which destroy acidities in the stomach and bowels, such as magnesia, prepared chalk, etc.

Alteratives are medicines which restore health to the constitution,

without producing any sensible effect, such as sarsaparilla, sulphur, etc.

Analeptics are medicines that restore the strength which has been lost by sickness, such as gentian, bark, etc.

Anodynes are medicines which relieve pain, and they are divided into three kinds, *paregorics*, *hypnotics*, *narcotics* (see these terms); camphor is anodyne as well as narcotic.

Antacids are medicines which destroy acidity, such as lime, magnesia, soda, etc.

Antalkalies are medicines given to neutralize alkalies in the system, such as citric, nitric, or sulphuric acids, etc.

Anthelmintics are medicines used to expel and destroy worms from the stomach and intestines, such as turpentine, cowhage, male fern, etc.

Antibilious are medicines which are useful in bilious affections, such as calomel, etc.

Antiscorbutics are medicines against scurvy, such as citric acid, etc.

Antiseptics are substances used to correct putrefaction, such as bark, camphor, etc.

Antispasmodics are medicines which possess the power of overcoming spasms of the muscles, or allaying severe pain from any cause unconnected with inflammation, such as valerian, ammonia, etc.

Aperients are medicines which move the bowels gently, such as dandelion root, etc.

Aromatics are cordial, spicy, and agreeably flavored medicines, such as cardamoms, cinnamon, etc.

Astringents are medicines which contract the fibres of the body, diminish excessive discharges, and act indirectly as tonics, such as oak-bark, galls, etc.

Attenuants are medicines which are supposed to thin the blood, such as ammonia, iron, etc.

Balsalmics are medicines of a soothing kind, such as Tolu, Peruvian balsam, etc.

Carminatives are medicines which allay pain in the stomach and bowels, and expel flatulence, such as aniseed water, etc.

Cathartics are strong purgative medicines, such as jalap, etc.

Cordials are exhilarating and warming medicines, such as aromatic confection, etc.

Corroborants are medicines and food which increase the strength, such as iron, gentian, sago, etc.

Demulcents correct acrimony, diminish irritation, and soften parts by covering their surfaces with a mild and viscid matter, such as linseed tea, etc.

Deobstruents are medicines which remove obstructions, such as iodide of potash, etc.

Detergents clean the surfaces over which they pass, such as soap, etc.

Diaphoretics produces perspiration, such as tartrate of antimony, etc.

Digestives are remedies applied to ulcers or wounds, to promote the formation of matter, such as resin ointments, warm poultices, etc.

Discutients possess the power of repelling or resolving tumors, such as galbanum, etc.

Diuretics act upon the kidneys and bladder, and increase the flow of urine, such as niter, squills, etc.

Drastics are violent purgatives, such as gamboge, etc.

Emetics produce vomiting, or the discharge of the contents of the stomach, such as mustard, tartar emetic, warm water, bloodroot, etc.

Emollients are remedies used externally to soften the parts they are applied to, such as spermaceti, palm oil, etc.

Epispastics are medicines which blister or cause effusion of serum under the cuticle, such as spanish flies, etc.

Errhines are medicines which produce sneezing, such as tobacco, etc.

Escharotics are medicines which corrode or destroy the vitality of the part to which they are applied, such as lunar caustic, etc.

Expectorants are medicines which increase expectoration, or the discharge of the bronchial tubes, such as ipecacuanha, etc.

Febrifuges are remedies used in fevers, such as antimonial wines, etc.

Hydragogues are medicines which have the effect of removing the fluid of dropsy, by producing water evacuations, such as gamboge, calomel, etc.

Hypnotics are medicines that relieve pain by procuring sleep, such as hops, etc.

Laxatives are medicines which cause the bowels to act rather more than natural, such as manna, etc.

Narcotics are medicines which cause sleep or stupor, and allay pain, such as opium, etc.

Nutrients are remedies that nourish the body, such as sugar, sago, etc.

Paregorics are medicines which actually assuage pain, such as compound tincture of camphor, etc.

Prophylactics are remedies employed to prevent the attack of any particular disease, such as quinine, etc.

Purgatives are medicines that promote the evacuation of the bowels, such as senna, etc.

Refrigerants are medicines which suppress an unusual heat of the body, such as wood-sorrel, tamarind.

Rubefacients are medicines which cause redness of the skin, such as mustard, etc.

Sedatives are medicines which depress the nervous energy, and destroy sensation, so as to compose, such as foxglove, etc.

Sialagogues are medicines which promote the flow of saliva or spittle, such as salt, calomel, etc.

Soporifics are medicines which induce sleep, as hops, etc.

Stimulants are remedies which increase the action of the heart and arteries, or the energy of the part to which they are applied, such as sassafras, which is an internal stimulant, and savine, which is an external one.

Stomachics restore the tone of the stomach, such as gentian, etc.

Styptics are medicines which constrict the surface of a part, and prevent the effusion of blood, such as kino, etc.

Sudorifics promote profuse perspiration or sweating, such as ipecacuanha, etc.

Tonics give general strength to the constitution, restore the natural energies, and improve the tone of the system, such as chamomile, etc.

Vesicants are medicines which blister, such as strong liquid ammonia, etc.

Measures—of housekeepers.—A great deal of poor food, especially cakes and other "recipe" preparations, is due to inaccuracy in measuring. "A pinch" of salt or pepper, or other condiment, may mean four times as much in one hand as in another—quite enough to entirely change the quality and flavor. Teaspoons, teacups, and coffeecups now vary greatly. The old standard teacup held just half a pint, or four to the quart.

It would be a simple matter and a great convenience for any housekeeper to keep always at hand accurate measuring-cups of earthenware or tin. Let a teacupful or a tumblerfull always mean exactly half a pint, and keep a cup of that size. Or use a small tin cup—one with a side handle being preferable. A cup just three inches in diameter and a trifle over two inches deep, holds half a pint (three inches across and two and one-ninth inches deep inside; or two inches in diameter and three and one-seventh inches deep). Any square or oblong cup whose inside length, depth, and width in inches multiplied together make about fourteen and one-half inches (14.437) holds a pint.

Spoon measuring is more important, especially in giving medicines. The top is so broad and it is so difficult to know when a spoon is evenly full, that a "teaspoonful dose" of any medicine, or of a flavoring extract in cooking, may be double what is prescribed. The standard teaspoon, evenly full, holds one-eighth of a fluid ounce, or one hundred and twenty-eight to a pint; and a standard tablespoon just three times as much, or forty-two to the pint. Sixty drops of water equal one teaspoonful, but drops of different liquids vary in size. Every family should have a "minim glass" (minim means a drop). This is a little glass tube or cup having a broad base and a lip for pouring from. There are marks on the side and figures ten,

twenty, thirty, forty, fifty, sixty, for so many drops—the figure sixty making just a standard teaspoonful. With this at hand one is always able to measure off exact teaspoonfuls of anything. In giving medicine, such regularity of doses may mean recovery of health. These glasses can be bought at most druggists for fifteen to twenty cents each.

Wheat flour, one pound is one quart; Indian meal, one pound and two ounces is one quart; butter, when soft, one pound is one quart; loaf sugar, broken, one pound is one quart; white sugar, powdered, one pound and one ounce is one quart; best brown sugar, one pound and two ounces is one quart; eggs, ten eggs are one pound; flour, eight quarts are one peck; flour, four pecks are one bushel.

LIQUIDS.—Sixteen large tablespoonfuls are one-half pint; eight large tablespoonfuls are one gill; four large tablespoonfuls are one-half gill; two gills are one-half pint; two pints are one quart; four quarts are one gallon; a common sized tumbler holds one-half a pint; a common sized wineglass holds one-half a gill; twenty-five drops are equal to one teaspoonful; sixty drops are equal to one tablespoonful.

Meats—to cure.—For curing beef, pork, mutton and hams, the following recipe is good: To one gallon of water take one and a half pounds of salt, one-half pound of sugar, one-half ounce each of saltpeter and potash. In this ratio the pickle can be increased to any quantity desired. Let these be boiled together until all the dirt from the sugar rises to the top, and is skimmed off. Then throw it into a tub to cool, and when cold, pour it over your beef or pork. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be sprinkled with powdered saltpeter, which removes all the surface blood, etc., leaving the meat fresh and clean.

Meat (Cold)—to prepare.—Meat balls or croquettes are nice. Remove all gristle and chop fine any and all kinds of meat you may have, mix with an equal quantity of mashed potato and grated bread, about half and half, season well with pepper and salt, and a little sage if you like, add any cold gravy you may have, or make moist enough with water, make into balls or cakes and fry, or use cold boiled rice and one or two eggs instead of potato and bread. Another way is to take a deep dish, put a layer of the chopped meat, then one of bread crumbs, season well; when the dish is full cover with a thick layer of nicely mashed potato, having previously moistened the meat and bread with milk, and unless quite fat meat is used, we add some lumps of butter. Bake in the oven three-fourths of an hour. It is very nice.

Meat (Escaloped).—Chop the meat rather coarse, season with salt and pepper. For one pint of meat use half a cupful of gravy and a heaping cupful of bread crumbs. Put a layer of the meat in an escalop dish, then gravy, then a thin layer of crumbs, and continue until the dish is full. The last layer should be a thick one of crumbs.

Cook in a hot oven from fifteen to twenty minutes. All kinds of cold meat can be escaloped, but beef is so dry that it is not so good as mutton and veal.

Meat—economy in.—Take cold meat of any kind—pieces left from the table—and cut in pieces a quarter of an inch square, put in a frying-pan, and cover the meat with water; then put in a small piece of butter; pepper and salt, and when this comes to boil, stir in a little flour and water, previously mixed. Have two or three slices of bread, toasted; place them on a platter, and pour the meat and gravy over them while hot. This will be found an excellent dish prepared from meat usually thrown away.

Meat—economical use of.—There is no difficulty in any man, however limited his means, having meat for his family every day. Take, for example, what is called a shank of beef. The very best can be bought for a fraction of what the dearest parts cost. A single pound cooked in a stew with dry bits of bread will make an excellent meal for an entire family.

Meat—to boil properly.—Boiling extracts a portion of the juice of meat, which mixes with the water, and also dissolves some of the solids; the more fusible parts of the fat melt out, combine with the water, and form soup or broth. The meat loses its red color, becomes more savory in taste and smell, more firm and digestible. If the process is continued too long, the meat becomes indigestible, less succulent, and tough. To boil meat to perfection, it should be done slowly, in plenty of water, replaced by other hot water as evaporation takes place; for, if boiled too quickly, the outside becomes tough; and not allowing the ready transmission of heat, the interior remains rare. The loss by boiling varies, according to Professor Donovan, from six and a quarter to sixteen per cent. The average loss on boiling butcher's meat, hams, pork and bacon is twelve, and on domestic poultry is fourteen and three-quarters. The loss per cent. on boiling salt beef is fifteen; on legs of mutton, ten; hams, twelve and a half; on salt pork, thirteen and a half; knuckles of veal, eight and a third; bacon, six and a quarter; turkeys, sixteen; chickens, thirteen and a half. The established rule as regards time, is to allow a quarter of an hour for each pound of meat if the boiling is rapid, and twenty minutes if slow. There are exceptions to this; for instance, ham and pork, which require from twenty to twenty-five minutes per pound, and bacon nearly half an hour. For solid joints allow fifteen minutes for every pound, and from ten to twenty minute over though of course, the length of time will depend much on the strength of the fire, regularity in the boiling, and size of the joint. The following table will be useful as an average of the time required to boil the various articles: Ham, twenty pounds' weight, requires six hours and a half, tongue, if dry, after soaking, four hours; tongue, out of pickle, two and a half to three hours, neck of mutton, one hour and a half; chicken, twenty minutes; large fowl, forty-five minutes; capon, thirty-five minutes; pigeon, fifteen minutes.

Meat—to keep a week or two in summer.—Farmers or others living at a distance from butchers can keep fresh meat very nicely for a week or two, by putting it into sour milk, or butter-milk, placing it in a cool cellar. The bone or fat need not be removed. Rinse well when used.

Meats and Fish—to preserve.—The meat to be preserved is first parboiled or somewhat more and freed from bones. It is then put into tin cases or canisters, which are quite filled up with a rich gravy. A tin cover, with a small aperture, is then carefully fixed on by solder; and, while the vessel is perfectly full, it is placed in boiling water, and undergoes the remainder of the cooking. The small hole in the cover is completely closed up by soldering while the whole is yet hot. The canister, with its ingredients, is now allowed to cool, in consequence of which these contract, and the sides of the vessel are slightly forced inward by atmospheric pressure, and becomes a little concave. The vessel being thus hermetically sealed, and all access of the air prevented, it may be sent into any climate without fear of putrefaction; and the most delicate food of one country may be used in another in all its original perfection, months and years after its preparation. Lobsters should be boiled longer than meats, and the scales removed previous to putting into the canisters. Salmon put up by this process is most delicious. By the French process the meat is boiled till it is three-quarters done, when two-thirds of it are taken out, the remaining one-third is boiled into a concentrated soup, and the meat previously taken out is put into the canisters, which are then filled up with the soup; the tin cover with aperture is soldered on, and the canister with its contents submitted to further boiling in hot water, when the aperture is closed, as above stated, and the canisters laid away in store.

Meat (Injured)—to restore.—When the brine sours and taints the meat, pour it off; skim it well, then pour it back again on the meat boiling hot; this will restore it, even when much injured. If tainted meat is injured, dip it in the solution of chloride of lime prescribed for rancid butter; it will restore it. Fly-blown meat can be completely restored by immersing it for a few hours in a vessel containing a small quantity of beer; but it will taint and impart a putrid smell to the liquor. Fresh meat, hams, fish, etc., can be preserved for an indefinite length of time without salt, by a light application of pyroligneous acid applied with a brush; it imparts a fine smoky flavor to the meat, and is an effectual preservative. But pure acetic acid may be used instead.

Meat—to sweeten.—Meat which has been slightly tainted may be restored to perfect sweetness, and the odor arising from it while boiling entirely prevented, by throwing into the pot a few pieces of charcoal contained in a small bag. The odor of vegetables slightly affected may be prevented in the same way. Red pepper, and even black pepper, produces a similar but less perfect result.

Meat—to make tender.—Tough meat may be made as tender as

any by the addition of a little vinegar to the water when it is put on to boil.

Medicine—to destroy the taste of.—Have the medicine in a glass as usual; and a tumbler of water by the side of it, then take the medicine and retain it in the mouth, which should be kept closed, and if you then commence drinking the water the taste of the medicine is washed away. Even the bitterness of quinine and aloes may be prevented by this means.

Medical Hints—short and safe.—In health and disease endeavor always to live on the sunny side. Sir James Wyle, late physician to the Emperor of Russia, remarked during long observation in the hospitals of that country, that the cases of death occurring in rooms averted from the light of the sun, were four times more numerous than the fatal cases in the rooms exposed to the direct action of the solar rays. When poison is swallowed, a good off-hand remedy is to mix salt and mustard, one heaped teaspoonful of each, in a glass of water and drink immediately. It is quick in its operation. Then give the whites of two eggs in a cup of coffee, or the eggs alone if coffee cannot be had. For acid poisons give acids. In cases of opium poisoning, give strong coffee and keep moving. For light burns or scalds, dip the part in cold water or in flour, if the skin is destroyed, cover with varnish. If you fall into the water, float on the back, with the nose and mouth projecting. For apoplexy, raise the head and body ; for fainting lay the person flat. Suck poisonous wounds, unless your mouth is sore. Enlarge the wound, or better cut out the part without delay, cauterize it with caustic, the end of a cigar, or a hot coal. If an artery is cut, compress above the wound ; if a vein is cut, compress below. If choked, get upon all-fours and cough. Before passing through smoke take a full breath, stoop low, then go ahead; but if you fear carbonic acid gas, walk erect and be careful. Smother a fire with blankets or carpets; water tends to spread boiling oil and increase the danger. Remove dust from the eyes by dashing water into them, and avoid rubbing. Remove cinders, etc., with a soft, smooth wooden point. Preserve health and avoid catching cold, by regular diet, healthy food, and cleanliness. Sir Astley Cooper said: "The methods by which I have preserved my own health, are temperance, early rising, and sponging the body every morning with cold water, immediately after getting out of bed; a practice which I have adopted for thirty years without ever catching cold." Water diluted with two per cent. of carbolic acid will disinfect any room or building, if liberally used as a sprinkle. Diphtheria can be cured by a gargle of lemon juice, swallowing a little so as to reach all the affected parts. To avert cold from the feet, wear two pairs of stockings made from different fabrics, one pair of cotton or silk, the other of wool, and the natural heat of the feet will be preserved if the feet are kept clean. In arranging sleeping-rooms the soundest and most refreshing slumber will be enjoyed when the head is toward the north. Late hours and anxious pursuits ex-

haust vitality, producing disease and premature death therefore the hours of labor and study should be short Take abundant exercise and recreation. Be moderate in eating and drinking, using simple and plain diet, avoiding strong drink, tobacco, snuff, opium, and every excess Keep the body warm, the temper calm, serene, and placid; shun idleness; if your hands cannot be usefully employed, attend to the cultivation of your minds. For pure health-giving fresh air, go to the country. Dr. Stockton Hough asserts that if all the inhabitants of the world were living in cities of the magnitude of London, the human race would become extinct in a century or two. The mean average of human life in the United States is thirty-nine and a fourth years, while in New York and Philadelphia it is only twenty-three years, about fifty per cent. of the deaths in these cities being of children under five years of age. A great percentage of this excessive mortality is caused by bad air and bad food.

Meerschaum (Imitation).—This can be carved like the genuine article. Take common potatoes peeled, and macerate them in water acidulated with eight per cent. sulphuric acid for thirty-six hours. Dry on blotting paper, and for several days on plates of plaster of Paris in hot sand. The potatoes should be strongly compressed while drying.

Men—how to judge.—Judge of men by what they do, not by what they say. Believe in looks rather than in words. Observe all their movements. Ascertain their motives and their ends. Notice what they say and do in their unguarded moments, when uder then influence of excitement. The passions have been compared to tortures, which force men to reveal their secrets. Before trusting a man, before putting it in his power to cause you a loss, possess yourself of every available information relative to him. Learn his history, his habits, inclinations and propensities; his reputation for honesty, industry, frugality and punctuality; his prospects, resources, supports, advantages and disadvantages; his intentions and motives of action; who are his friends and enemies, and what are his good or bad qualities. You may learn a man's good qualities and advantages from his friends—his bad qualities and disadvantages from his enemies. Make due allowance for exaggeration in both. Finally, examine carefully before engaging in anything and act with energy afterward. Have the hundred eyes of Argus beforehand and the hundred hands of Briarius afterward.

Menstruation (Painful)—anodyne for.—Extract of stramonium and sulphate of quinine, each sixteen grains; macrotin, eight grains; morcrotin, eight grains; morphine, one grain; make into eight pills. Dose, one pill, repeating once or twice only, forty or fifty minutes apart, if the pain does not subside before this time. Pain must subside under the use of this pill, and costiveness is not increased.

Metal—to clean.—Mix half a pint of refined neat's-foot oil and half a gill of spirits of turpentine. Scrape a little kernel of rotten stone, wet a woolen rag therewith, dip it into the scraped kernel, and

rub the metal well. Wipe it off with a soft cloth, and polish with dry leather.

Metals—to harden.—Iron, sixty parts; chrome, forty parts; form a composition as hard as the diamond. A high degree of hardness may also be imparted to iron or steel by adding one-fourth part of silver. Copper may be hardened by the fumes of zinc and tin. The specula of Lord Ross' telescope is one part tin and one part copper; this is as hard as steel, and takes a very high polish; if more than this be added it will scarcely cohere.

Metals—to plane.—The first operation about planing, is to oil your planer and find out if the bed is smooth. If it is not, file off the rough places, then change the dogs to see if they will work well, and find out the movments of the planer. After doing this, bolt your work on the bed, and, if it is a long, thin piece, plane off a chip, then turn it over and finish the other side, taking two chips, the last of which should be very light. Great care should be taken in bolting it to the bed, not to spring it. After finishing this side turn it to the other side, and take off a light cut to finish it.

Metronome—to construct.—Take a cheap clock movement and substitute for the pendulum a wire with a sliding weight, marking the wire with a file at the different points of graduation. Used to indicate the proper time in music.

Mice in Corn Stacks—to prevent ravages of.—Sprinkle from four to six bushels of dry white sand upon the root of the stack before the thatch is put on. The sand is no detriment to the corn, and stacks thus dressed have remained without injury. So very effective is the remedy, that nests of dead young mice have been found where the sand has been used, but not a live mouse could be seen.

Mica—to clean.—Mica in stoves (often wrongly called "isinglass"), when smoked, is readily cleaned by taking it out and thoroughly washing with vinegar a little diluted. If the black does not come off at once, let it soak a little.

Mildew—to remove from cloth.—The most effectual method is one which has never failed with us, but which needs to be used with care. It worked to a charm in one case where a careless laundress left a basket of clothes, including the fine clothing of two little children, to stand in hot weather till every article was mildewed. Despairing, we put them in the hands of a woman noted for her wisdom in all household ways, and she brought them back in perfect condition.

Dissolve two ounces of chloride of lime in one quart of boiling water; then add three quarts of cold water. Strain this through cloth, lest any tiny lumps remain, and soak the mildewed spots in the liquid for five or six hours, and then thoroughly rinse in clean water. This is effectual. The dangers to be avoided are the use of too strong a solution, soaking too long, and insufficient rinsing, the result of which would be a weakening of the fiber of the cloth itself. Other methods are;

1. Cover the spot with a paste composed of soft soap, starch, salt, and the juice of a lemon. The directions say half as much salt as starch Lay the cloth wet with this mixture in the sun, and renew the operation till the spots disappear.

2. Wet the spots in buttermilk, and leave in the sun till dry, then rinse.

3. Use soft soap and chalk.

The difficulty is an obstinate one, and while some of the milder methods may succeed, they may fail entirely.

Mildew—to remove from linen.—Remove mildew from linen by wetting the spot, rubbing on chalk, and exposing it to the air. Diluted hartshorn will take out mildew from woolen stuffs. A weak solution of chloride of lime can be applied to almost any fabric, but must be used with care, especially on some colors.

Milk—for drink.—Some persons are averse to milk, because they find it indigestible, or makes them bilious. A frequent reason for such consequences is that milk is drunk as if it were so much water. Where digestion is not strong it only agrees when leisurely sipped, and bread eaten with it, or else cooked with suitable solids.

Milk and Butter—increase of.—If cows are given four ounces of French boiled hemp seed, it will greatly increase the quantity of milk. If pans are turned over this milk for fifteen minutes when first milked, or till cold, the same milk will give double the quantity of butter.

Milk—healthfulness of.—If any one wishes to grow fleshy, a pint of milk on retiring at night will soon cover the scrawniest bones. Although we see a good many fleshy persons nowadays, there are a great many lean and lank ones, who sigh for the fashionable measure of plumpness, and who would be vastly improved in health and appearance could their flesh be rounded with good, solid flesh. Nothing is more coveted by a thin woman than a full figure, and nothing will so rise the ire and provoke the scandal of the "clipper-build" as the consciousness of plumpness in a rival. In a case of fever and summer complaint, milk is now given with excellent results. The idea that milk is feverish has exploded, and it is now the physician's great reliance in bringing through typhoid patients, or those in too low a state to be nourished by solid food. It is a mistake to scrimp the milk-pitcher. Take more milk and buy less meat.

Milk (Hot)—as a stimulant.—If any one is fatigued, the best restorative is hot milk, a tumbler of the beverage as hot as can be sipped. This is far more of a restorative than any alcoholic drink.

Milk—to increase the flow of in cows.—Give your cows three times a day, water slightly warm, slightly salted, in which bran has been stirred at the rate of one quart to two gallons of water. You will find if you have not tried this daily practice, that the cow will give twenty-five per cent. more milk, and she will become so much attached to the diet that she will refuse to drink clear water unless very thirsty, but this mess she will drink at almost any time, and ask for more. The amount ot this drink necessary is an ordinary water-

pailful each time, morning, noon, and night. Avoid giving cows "slops," as they are no more fit for the animal than they are for the human.

Milk—preserved or solidified—1. Fresh-skimmed milk, one gallon; sesquicarbonate of soda (in powder), one and one-half drams. Mix; evaporate to one-third part by heat of steam or water-bath, with constant agitation; then add of powdered sugar six and one-half pounds, and complete the evaporation at a reduced temperature. Reduce the dry mass to powder, add the *cream*, well drained, which was taken from the milk. After thorough admixture, put the whole into well-stopped bottles or tins, and hermetically seal.

2. Carbonate of soda, one-half dram; water, one fluid ounce; dissolve; add of fresh milk, one quart; sugar, one pound; reduce by heat to the consistency of a syrup, and finish the evaporation on plates, by exposure in an oven. *Observe*—About one ounce of the powder agitated with one pint of water forms a good substitute for milk.

Milk—punch—Yellow rinds of two dozen lemons; steep two days in two quarts brandy; add spirit, three quarts; hot water, two quarts; lemon juice one quart; loaf-sugar, four pounds; boiling milk, two quarts; two nutmegs grated. Mix, and in two hours strain through wool.

Milk—to keep sweet—Put into the milk a small quantity of carbonate of magnesia.

Milk (Quality)—how to test.—Procure any long glass vessel—a cologne bottle or long phial. Take a narrow strip of paper, just the length from the neck to the bottom of the phial, and mark it off with one hundred lines at equal distances; or into fifty lines, and count each as two, and paste it upon the phial, so as to divide its length into a hundred equal parts. Fill it to the highest part with milk fresh from the cow, and allow it to stand in a perpendicular position twenty-four hours. The number of spaces occupied by the cream will give you its exact percentage in the milk without any guess work.

Milk—to preserve—Provide bottles, which must be perfectly clean, sweet, and dry; draw the milk from the cow into the bottles, and as they are filled, immediately cork them well up, and fasten the corks with pack-thread or wire. Then spread a little straw at the bottom of a boiler, on which place bottles with straw between them, until the boiler contains a sufficient quantity. Fill it up with cold water; heat the water, and as soon as it begins to boil, draw the fire, and let the whole gradually cool. When quite cold, take out the bottles and pack them in saw-dust, in hampers, and stow them in the coolest part of the house. Milk preserved in this manner, and allowed to remain even eighteen months in the bottles, will be as sweet as when first milked from the cow.

Mirrors—to clean.—Cleaning mirrors is an easy operation when rightly understood. The greatest care should be taken in cleaning

to use only the softest articles, lest the glass should be scratched. It should first be dusted with a feather brush; then washed over with a sponge dipped in spirits to remove the fly spots; after this it should be dusted with the powder blue in a thin muslin bag, and finally polished with an old silk handkerchief.

Mirrors—to repair.—To repair a damaged mirror: Pour upon a sheet of tin-foil about three drams of quicksilver to the square foot of foil. Rub smartly with a piece of buckskin until the foil becomes brilliant. Lay the glass upon a flat table, face downward; place the foil upon the damaged portion of the glass, lay a sheet of paper over the foil, and place upon it a block of wood or a piece of marble with a perfectly flat surface; put upon it sufficient weight to press it down tight; let it remain in this position a few hours. The foil will adhere to the glass.

Mirrors—to care for.—The strong light of the sun should never be allowed to fall directly upon a mirror. The amalgam or union of tin-foil and mercury which is spread on glass to form a looking-glass is easily ruined by the direct continued exposure to the solar rays, causing the glass to look misty.

Miscellaneous Items.—Cream of tartar rubbed upon soiled white kid gloves clean them well.

A fine comb loosens the dead skin of the scalp just as friction rubs off the scarf skin of the body.

Grained wood should be washed with cold tea.

Sour milk removes iron rust from white goods.

Try pure benzine to remove stains from hair-cloth furniture.

When washing oil-cloths, put a little milk in the last water they are washed with. This will keep them bright and clean longer than clear water.

Furniture needs cleaning as much as other wood-work. It may be washed with warm soap-suds, quickly wiped dry and then rubbed with an oily cloth.

To make silk which has been wrinkled appear exactly like new, sponge it on the surface with a weak solution of gum arabic or white glue, and iron on the wrong side.

A paste made of whiting and benzine will clean marble, and one made of whiting and chloride of soda spread and left to dry (in the sun if possible) on the marble will remove spots.

Single cream is cream that has stood on the milk twelve hours It is best for tea and coffee.

In boiling eggs put them in boiling water. It will prevent the yolk from coloring black.

In making a crust of any kind, do not melt the lard in flour. Melting will injure the crust.

To beat the white of eggs quickly put in a pinch of salt. The cooler the eggs the quicker they will froth. Salt cools and also freshens them.

There is a greenness in onions and potatoes that renders them hard

to digest. For health's sake put them in warm water for an hour before cooking.

A few dried or preserved cherries, with stones out, are the very best thing possible to garnish sweet dishes.

Double cream stands on its milk twenty-four hours, and cream for butter frequently stands forty-eight hours.

Cod-liver oil contains iodine and bromide.

There are 174,000,000 air cells in the lungs.

The nearer the rain cloud is to the earth the larger the drops.

Soda put into the sea water makes it fit for washing clothes.

Glauber is the sulphate of soda of modern chemists.

Meat immersed in molasses has been preserved for months.

Cucumber peelings are said to be a sure cure for cockroaches.

The distilled juice of the cocoa tree forms the well-known arrak.

A small piece of paper or linen moistened with turpentine and put into the wardrobe or drawers for a single day at a time, two or three times a year, is a preventative against moths.

To take machine oil out of white cotton goods, rub on spirits of turpentine before washing.

Benzine and common clay will clean marble.

Some ingenious man in Rhode Island has discovered a use for the despised milk-weed. Its seeds yield a finer oil than linseed. Its gum is as good as India rubber, and its floss resembles Irish poplin when spun.

Plug up mice holes with soap. The mice will not go through.

Camphor placed in drawers or trunks will prevent mice from doing them any injury.

Jelly molds should be greased with cold butter. When you wish to remove the jelly or pudding, plunge the mold into hot water, remove quickly, and the contents will come out in perfect form and without any trouble.

Mites in Cheese—to destroy.—1. These are at all times better avoided than destroyed, for when they have become very numerous they do a great deal of damage in a short time. To avoid mites the best plan seems to be to leave the cheese exposed to the air, and to brush it occasionally; some prefer wrapping the cheese in a buttered paper, but the former plan, we think, is the best. When mites have become very numerous, they may be killed by suspending the cheese by a piece of wire or string, and dipping it for a moment into a pail of boiling water. The boiling water will kill all the mites, and do no harm to the cheese unless it is left in it too long.

2. Cheese kept in a cool larder or cellar, with a cloth rung out of clean, cold water constantly upon it, will never have mites in it, or if it has, this will soon destroy them, and also greatly improve the cheese, keeping it always moist.

Mittens—to knit.—For the hand cast on sixty stitches, and widen at one end every time you knit across until you have widened twelve stitches, knit plain four times across, narrow down twelve stitches

widen twelve stitches, narrow twelve, and you have the head of the mitten. Bind off and sew it off, leaving a space for the thumb to be sewed in. For the thumb cast on eighteen stitches and widen at both ends—at the top widen five stitches, knit two plain, then narrow five, but at the other end of the needle widen continuously, as this is the gore that runs toward the wrist. When one-half of the thumb has been knitted begin to narrow at this end, while you repeat the widening and narrowing at the top. When the thumb is knitted bind off all but six stitches—knit a little square with them for a gore between the thumb and hand. Sew up, and then sew into the space left in the hand. The wrist may be finished as long as wanted, either by knitting or crocheting. This number of stitches makes a medium sized mitten in Saxony yarn, and, of course, is to be varied according to the size of the yarn used.

Mittens (Silk)—for gentlemen.—Four No. 18 needles, three half ounce balls of knitting silk. Cast on seventy-eight stitches; knit two and purl two round the needles till there is about an inch and a half of webbing; then knit plain once around, knit to the middle of the needle, seam one, make one, knit one, make one, seam one. Knit plain, always seaming the seam stitch, and every sixth or seventh row make a stitch inside the seam stitch as directed until there are as many stitches between the seams as there are in the other needles (twenty-six). Slip these stitches on a thread; tie the ends. Cast on eight or ten stitches between the seams and knit around plain till the mitten reaches the nail of the third rows, narrow and knit two rows plain, narrow and knit one row, then narrow every time till all the stitches but two are knit. Draw the end of the silk through these stitches and fasten securely; a fine darning needle is the best thing to do it with.

For the thumb take the stitches off the thread and take up the eight or ten stitches made between the seams. Knit once around plain, then knit two together of the made stitches every time around till they are all taken up. Then knit round and round till the thumb is long enough. Narrow it off by knitting two together at the beginning of each needle till it can be finished as the hand. These directions are equally good for yarn mittens, changing the size of the needles and the number of stitches according to the size of the yarn used.

Mock Terrapin—a supper dish.—Half a calf's liver, season, fry brown. Hash it, not very fine, dust thickly with flour, a teaspoonful of mixed mustard, as much cayenne pepper as will lie on a half dime; two hard eggs, chopped fine, a lump of butter as large as an egg, a teacupful of water. Let it boil a minute or two. Cold veal will do if liver is not liked.

Money Maxims.—When a mortgage on a farm is so heavy that the farmer never tries to lessen or lift it, the sooner he finds a smaller place the better.

If you want to understand fully the meaning of the old adage, "A fool and his money are soon parted," buy a lottery ticket.

In whatever you undertake form a plan and stick to it, working like a gimlet to a point.

All kinds of useful employments are equally honorable.

Every man starting in life should consider what his physical make, tastes, education, habits of thinking and of life, fit him for, and having decided, that should be his life work, and no consideration of assumed respectability should cause him to turn from the bench or forge to sermons or briefs, unless his judgement convinces him that for the new field of action he has a natural aptitude or predilection.

It don't pay to fold your hands and wait for a fortune to fall into your lap. Twenty men remain hopelessly poor waiting for a fortune to fall into their lap, where one is made rich by the longed-for transaction of the dried-up uncle or grandfather.

Moss on Trees—to destroy.—Paint them with whitewash made of quicklime and wood ashes.

Mosquitoes—to protect from.—Quassia is used in medicine as a powerful tonic, and the chips are sold by chemists from fifteen to twenty-five cents per pound. The tree is indigenous to the West Indies and to South America. A young friend of mine, severely bitten by mosquitoes, and unwilling to be seen so disfigured, sent for quassia chips, and had boiling water poured upon them. At night, after washing, she dipped her hands into the quassia water, and left it to dry on her face. This was a perfect protection, and continued to be so whenever applied. At the approach of winter, when flies and gnats get into houses, and sometimes bite venomously, a grandchild of mine, eighteen months old, was thus attacked. I gave the nurse some of my weak solution of quassia to be left dry on his face, and he was not bitten again. It is inocuous to children, and it may be a protection also against bed insects, which I have not had the opportunity of trying. When the solution or the quassia is strong it is well known to be an active fly poison, and is mixed with sugar to attract flies, but this is not strong enough to kill at once.

Mosquitoes—to get rid of.—Mosquitoes, says somebody, love beef blood better than they do any that flows in the veins of human kind. Just put a couple of generous pieces on plates near your bed at night, and you will sleep untroubled by these pests. In the morning you will find them full and stupid with the beef blood, and the meat sucked as dry as a cork.

Mosquito Remedy.—To clear a sleeping-room of mosquitoes, take a piece of paper rolled around a lead-pencil to form a case, and fill this with very dry Pyrethrum powder (Persian insect powder) putting in a little at a time, and pressing it down with the pencil. This cartridge, or cigarette, may be set in a cup of sand to hold it erect. An hour before going to bed the room is to be closed, and one of these cartridges burned. A single cartridge will answer for a small

room, but for a large one two are required. Those who have tried this find that it effectually disposes of the mosquitoes.

Moths—protection against.—In May the clothes moth begins to fly about our rooms. It is a small, light, buff-colored "miller," dainty and beautiful on close inspection. But it is necessary to keep a sharp lookout for the safety of our furs and flannels, and we must wage war upon it. In the first place, we must carefully put away everything we can, upon which it will lay its eggs. If we pack away our furs and flannels early in May, before the moth has begun to lay its eggs, and leave them in boxes or bags so tight that the flying moth cannot squeeze in, no further precaution is necessary. Clean paper bags are recommended for this purpose—those used for flour meal bags. They should be without holes or openings anywhere. These bags, when filled and closed firmly, may be put away on closet shelves or in loose boxes, without danger to their contents, so far as moths are concerned, without need of camphor or other strong odors to drive moths away. Furs are usually sold in boxes in which they may be kept. Beat them well when you finally put them away for the season. If you delay putting them away until June, examine the furs well, and shake and beat them very thoroughly, in order that any moth eggs that may possibly have been laid in them may be thoroughly removed or killed. Furs sealed up early in May need no camphor or tobacco or other preventive. Muff and tippet boxes should be tied up securely in bags, or made safe by mending holes and pasting a strip of paper around the junction of the cover with the box below, so as to close all openings. Woolen garments must not hang in closets through the summer, in parts of the country where moths abound. They should be packed away in tight trunks or boxes, or sealed up in bags. Woolen blankets must be well shaken and carefully put away, unless they are in daily use. Early in June the larvæ of the moth begin their ravages, and now unless you dwell in places where moths are not found, look sharp, or you will find some precious thing that you have forgotten—some good coat unused for a few weeks, or the woolen cover of a neglected piano, already more or less riddled by the voracious moths. It is their nature to eat until they have grown strong enough to retire from the eating business and go into the chrysalis condition.

Some things cannot be well packed away in light boxes and bags, and among these it is well to scatter small lumps of camphor or clippings of Russian leather. Some use tobacco, though I think camphor is usually preferred. It is said that powdered black pepper scattered under the edge of carpets will preserve them from attacks.

Moths in Carpets.—Moths will work in carpets in rooms that are kept warm in winter as well as in the summer. A sure method of removing the pests is to pour strong alum water on the floor to the distance of half a yard around the edges before laying the carpets. Then once or twice during the season sprinkle dry salt over the car-

pet before sweeping. Insects do not like salt, and sufficient adheres to the carpet to prevent their alighting upon it.

Moths in Carpets—to kill.—Untack your carpet, turn it back a half yard all around the room, wash the boards with a saturated solution of camphor, putting it on with a brush—a paint brush is good, then lay the carpet back in its proper place, and put over it a towel wrung out of water and camphor, and iron it thoroughly with a real hot iron so as to steam it through and through, this will kill the insects and all their larvæ.

Moth Preventive.—A very pleasant perfume, and also preventive against moths, may be made of the following ingredients. Take of cloves, carraway seeds, nutmeg, mace, cinnamon and Tonquin beans, of each one ounce; then add as much Florentine orris-root as will equal the other ingredients put together. Grind the whole well to powder, and then put it in little bags, among your clothes, etc.

Moths in Feather Beds.—If you are troubled with moths in your feather beds, boil the feathers in water for a short time; then put them in sacks and dry them, working them with the hands all the time.

Moths—to prevent the damage of.—Furs, flannels and woolen goods, when laid by for any time, are very liable to injury from moths. Most persons may have noticed at times in their houses a small, light brown-colored moth, and another with black and white wings; both these are very dangerous inmates. Whenever they are seen they should be destroyed. But no articles of fur, flannel and woolen fabric should be left long without being taken out and shaken or brushed. They should always be well aired before they are put away. If a few bitter apples, which can be bought at the chemists, are enclosed in muslin bags, and put into the drawers or closets, no moth will ever come near them.

Moth Patches—to remove.—Moth patches may be removed from the face by the following remedy: Into a pint bottle of rum put a teaspoonful of flour of sulphur. Apply this to the patches once a day, and they will disappear in two or three weeks.

Mother of Pearl—to clean.—Mother of pearl may be polished with finely powdered pumice-stone which has been washed to separate the impurities and dirt, and then finished with putty powder and water applied by a rubber, which will produce a fine gloss.

Mother of Pearl Work.—This delicate substance requires great care in its workmanship, but it may be cut with the aid of saws, files and drills, with the aid of muriatic or sulphuric acid, and it is polished by colcothar, or the brown-red oxide of iron left after the distillation of the acid from sulphate of iron. In all ornamental work, where pearl is said to be used, for flat surfaces, such as inlaying, mosaic work, etc., it is not real pearl, but mother of pearl that is used.

Mountain Ash Berries—to preserve.—Mountain ash berries are very showy, and would be of great use in holiday decoration were

they not ripe and away long before winter. If gathered when ripe, they shrivel and become discolored long before they are wanted for use. They may be preserved in perfection if the clusters are covered with strong brine. Stick a pin here, and try it next autumn, not only on the berries of the mountain ash, but on a number of other brilliant and perishable fruits. Let us pickle the berries.

Mouse-trap—cheap and good.—Take the bowl of a clean clay pipe and fill it with cheese; put it under the edge of a glass tumbler in such a manner that a slight touch will cause the tumbler to slip off—the bait and mouse of course underneath. This arrangement will catch more mice than any trap I ever saw, at the cost of one cent.

Mouth Wash.—Proof spirits, one quart; borax and honey, of each one ounce; gum myrrh, one ounce; red sanders wood, one ounce. Rub the honey and borax well together in a mortar, then gradually add the spirit, the myrrh and sanders wood, and macerate fourteen days.

Mucilage—to make.—1. To make good mucilage, take equal parts of gum arabic and gum tragacanth, and add sufficient water to dissolve; add a couple of cloves, and you have good, cheap mucilage.

2. This is generally made of water and gum arabic. An excellent mucilage can also be made with one tablespoonful of common dry starch boiled in a teacupful of water.

Muffs—for the feet.—A nice present for any one who has to get out of bed at night in order to tend to small children or an invalid is a pair of foot-muffs. They are of clouded zephyr, knit on wooden needles, garter fashion. Forty stitches are set up, and the knitting proceeds back and forth across the needles, until the strip is about ten inches long. Bind it off, and double it together, and make it into a bag, whole at the bottom, and with a seam at each side. The seams are crocheted together, or may be loosely sewed with zephyr, like that used in knitting. With a coarse crochet needle make loops around the top of the bag, crocheting a long stitch into every third stitch around the bag, and joining them together by chain-stitch. These loops are for a rubber tape about ten inches long. Crochet scallops around the top, as ornamental as you like. This bag does not look much like boot, shoe, or slipper, but put it on your foot and it answers nicely for a foot warmer. The number of stitches required would depend upon the size of the needles. The knitting should be loose and elastic.

Muffins (Graham).—To three cups of self-raising Graham flour, rub in one large spoonful of shortening, and two spoonfuls of molasses, making a thick batter. Bake in a quick oven, in iron molds or muffin-rings. By simply mixing self-raising Graham flour and cold water, and baking as above, an excellent and healthful article of food for dyspeptics is produced. One recommended and used at most of the water-cure and health establishments throughout the country. In making bread or cake, the smaller the mass or loaf the better—about a pound or so is best—so as to allow a thorough baking

in a short time. Bake in a hot oven immediately after mixing; the oven should be ready when you begin to mix.

Muffins (Graham).—One quart of Graham flour, two teaspoonfuls of baking-powder, a piece of butter the size of a walnut, one egg, one tablespoonful of sugar, one-half teaspoonful of salt, milk enough to make a batter as thick as for griddle-cakes.

Muffins—of granulated wheat.—Are made of three cupfuls of granulated wheat, four of sugar, two of cream tartar, one of soda, one of salt, two cupfuls of milk, two-thirds cupful of water, two eggs. Mix all the dry ingredients together; beat the eggs light and add the milk to them ; stir this on the dry ingredients, and bake half an hour in a buttered muffin-pan.

Muffins (Hominy).—Two and one-half cups of soft-boiled hominy, one quart of sweet milk, three eggs beaten well, a large tablespoonful of melted butter, a tablespoonful of sugar, a little salt, and a large cupful of flour with two teaspoonfuls of baking powder sifted with it. Mix well before adding flour, beat the flour quickly, and bake in hot muffin rings.

Muffins (Mush).—Cold mush is not a very promising mixture to the eye, but when thinned with milk and thickened with a little wheat flour and eggs, in the proportion of four to a quart, it makes very good muffins.

Muffins (Raised).—One pint of warm milk, one-half cake compressed yeast or one-half cupful of liquid yeast, one quart of flour, one tablespoonful of butter, two eggs, one teaspoonful of salt. Beat the eggs well, and add them and the salt, yeast and butter to the milk; stir gradually into the flour; beat until the batter is light and smooth; let it rise four hours in a warm place. Fill buttered muffin pans two thirds full, let them stand in a warm place until the pans are full, and then bake half an hour. In case you do not have much time to let them rise, use double the quantity of yeast.

Mumps.—This disease, most common among children, begins with soreness and stiffness in the side of the neck. Soon a swelling of the paratoid gland takes place, which is painful and continues to increase for four or five days, sometimes making it difficult to swallow, or open the mouth. The swelling sometimes comes on one side at a time, but commonly upon both. There is often heat and sometimes fever, with a dry skin, quick pulse, furred tongue, constipated bowels, and scanty and high-colored urine. The disease is contagious.

Treatment.—Keep the face and neck warm, and avoid taking cold, Drink warm herb teas, and if the symptoms are severe, four to six grains of Dover's powder; or if there is costiveness, a slight physic, and observe a very simple diet. If the disease is aggravated by taking cold, and is very severe, or is translated to other glands, physic must be used freely, leeches applied to the swelling, or cooling poultices. Sweating must be resorted to in this case.

Mushrooms—to pickle.—Choose small white mushrooms; they should be but one night's growth. Cut off the roots and rub the

mushrooms clean with a bit of flannel and salt; put them in a jar, allowing to every quart of mushrooms one ounce each of salt and ginger, half an ounce of whole pepper, eight blades of mace, a bay leaf, a strip of lemon rind and a wineglassful of sherry; cover the jar close, and let it stand on the stove, so as to be thoroughly heated and on the point of boiling; so let it remain a day or two, till the liquor is absorbed by the mushrooms and spices; then cover them with hot vinegar, close them again, and stand till it just comes to a boil; then take them away from the fire. When they are quite cold divide the mushrooms and spice into wide-mouthed bottles, fill them up with the vinegar, and tie them over. In a week's time, if the vinegar has shrunk so as not entirely to cover the mushrooms, add cold vinegar. At the top of each bottle put a teaspoonful of salad or almond oil; cork close, and dip in bottle resin.

Mushrooms—to select.—Whenever a fungus is pleasant in flavor and odor it may be considered wholesome; if, on the contrary, it have an offensive smell, a bitter, astringent, or styptic taste, or even if it leave an unpleasant flavor in the mouth, it should not be considered fit for food. The color, figure, and texture of these vegetables do not afford any characters on which we can safely rely; yet it may be remarked that in color the pure yellow, gold color, bluish pale, dark or luster brown, wine red, or the violet, belong to many that are esculent; while the pale or sulphur yellow, bright or blood-red, and the greenish belong to few but the poisonous. The safe kinds have most frequently a compact, brittle texture; the flesh is white; they grow more readily in open places, such as dry pastures and waste lands, than in places humid or shaded by wood. In general, those should be suspected which grow in caverns and subterranean passages, on animal matter undergoing putrefaction, as well as those whose flesh is soft and watery.

Mushrooms (Stewed).—Cut off the ends of the stalks, and pare neatly some middle sized or button mushrooms, and put them into a basin of water with the juice of a lemon as they are done. When all are prepared, take them from the water with the hands to avoid the sediment, and put them into a stew-pan with a little fresh butter, white pepper, salt, and a little lemon juice; cover the pan close, and let them stew gently for twenty minutes or half an hour; then thicken the butter with a spoonful of flour, and add gradually sufficient cream, or cream and milk, to make the same about the thickness of good cream. Season the sauce to palate, adding a little pounded mace or grated nutmeg. Let the whole stew gently until the mushrooms are tender. Remove every particle of butter which may be floating on the top before serving.

Muslin—ways to bleach.—For every five pounds dissolve twelve ounces chloride of lime in a small quantity of soft boiling water. When cold strain into it enough water to cover the goods. Boil them fifteen minutes in strong soap-suds, wring out in clear cold water, then put the goods in the chloride of lime solution from ten to

thirty minutes, with frequent airings; rinse well and dry the goods; then scald in clear soft water and dry. An excellent bleaching fluid is made by boiling together one gallon of water, two ounces of pearl-ash, two ounces salts of tartar, and a quarter of a pound of hard soap. One pint of this mixture is to be put into one tub of clothes, which should be soaked over night and washed as usual the next day. Those who have plenty of sour milk may bleach muslin in the following manner. Boil thick sour milk, strain it into a stone pot, and then put in whatever is to be bleached; let it remain there a few days, turning and airing it thrice a day, wring out, wash in cold soft water, and spead in the hot sun. Repeat the process if necessary.

Mustard—to make.—Mustard should always be made in small quantities, fresh as required. It soon spoils by keeping. Put the quantity required into a teacup, and stir in the boiling water till it is of the proper consistency, and perfectly smooth. It should never be made in the mustard-pot in which it is to be brought to the table. The French mix mustard with vinegar instead of water, and some persons add salt; but good Durham mustard is best made plain. Milk, with the addition of a little cream, if used instead of water, is said to take away all bitterness and to impart great softness to mustard.

Mustard—to mix.—1. To two spoonfuls of mustard add one teaspoonful of salt, two of sugar, and vinegar enough to mix in a very stiff paste. Then add sufficient boiling water to make it of proper consistency for table use.

2. Mustard should be mixed with water that has been boiled and allowed to cool. Hot water destroys its essential qualities, and raw cold water might cause it to ferment. Put the mustard in a cup with a small pinch of salt, and mix with it very gradually sufficient boiling water to make it drop from the spoon without becoming watery.

Musty Flour—to correct.—Carbonate of magnesia, three pounds; flour, seven hundred and sixty-five pounds; mix. This improves bad flour, causing it to become more wholesome, producing lighter and better bread than when alum is used, and absorbs and dissipates the musty smell.

Mutton (Harricot).—Take a loin of mutton, cut it into small chops, season it with ground pepper, allspice, and salt; let it stand a night and then fry it. Have good gravy well seasoned with flour, butter, catsup and pepper, if necessary. Boil turnips and carrots, cut them small, and add to the mutton stewed in the gravy, with the yolks of hard boiled eggs, and forced meat balls.

Mutton (Roast).—The loin, haunch, and saddle of mutton and lamb must be done the same as beef. All other parts must be roasted with a quick, clear fire; baste it when you put it down, and dredge it with a little flour just before you take it up. A leg of mutton of six pounds will require one hour to roast before a quick fire.

Nails—to whiten.—Diluted sulphuric acid, two drams; tincture of myrrh, one dram; spring water, four ounces. Mix. First

cleanse the nails with white soap, and then dip the fingers into the wash.

Napery.—Every housekeeper feels the need of at least one set of handsome table linen that shall always be ready for company occasions. Fringed and embroidered damask tablecloths are very expensive, but I have seen a tablecloth in a mountain farmhouse that was pretty without being costly. The material was good linen sheeting with a fringe raveled out and tied by the daughter of the owner. Above the fringe was a running pattern, not exactly a vine, but closely set groups of leaves and small fruits of various kinds, done very sketchily in outline work, which is simply long back stitching, in colored thread, crewel or silk. The work I refer to was indelible cotton of various shades. In the center was a large June apple with leaves. From the same linen, which, as it was bought, was of course too wide for a table cover, small square napkins had been cut off and finished with a narrow fringe. In the center of each was worked patterns of fruit, a bunch of grapes on one, a pear on another and berries of different kinds on others. The designs were all taken with the help of transfer paper from agricultural papers and seed catalogues, and the outlining is such rapid work that two or three napkins could be embroidered in an afternoon. Kate Greenaway patterns, copied from "Under the Window," and other children's books, or even from advertising cards, would be as pretty as fruit designs, and easy to execute. If they are used, the patterns on the tablecloth should correspond.

Napkin Ring—to crochet.—Use cotton twine, of a quality between the common wrapping twine and macrame thread. It is smoother and harder twisted than the common white twine, yet not so stiff as the macrame. Use a small steel needle and crochet rather tight and firm. 1. Make a chain of forty stitches. Join the ends. 2. One chain. (Draw thread through the two upper threads of first stitch in first row, then through the two stitches on the needle, thus making a single crochet). Finish the row in single crochet. 3. Like the second row. 4. Five chain, one double crochet into the fourth stitch of third row (three chain, one double crochet into the fourth stitch in third row from last double crochet). Repeat between parenthesis until you have finished the row, but at the end, instead of one double crochet, catch it into the second stitch of fine chain. 5. Same as second row. 6. Same as second row. 7. Two chain, three double crochet into the first stitch of sixth row (skip three stitches in sixth row and four double crochet into the next stitch). Repeat between parenthesis until you finish the row. 8. (Five double crochet into the middle of four double crochet in seventh row, one single crochet into the end of four double crochet in seventh row). Repeat between parenthesis until the row is finished, then break off the thread. 9. Tie the thread on to the end where you first began, and make two rows on this edge like the seventh and eight rows. Make some very thick flour starch and starch your ring, rubbing well into

the twine, then pull into the shape of an hour glass and dry. Repeat the starching two or three times until it is perfectly stiff. When thoroughly dry give it a coat of unbleached shellac. Weave ribbon into the open meshes in the middle, and finish with a knot.

Nausea—to relieve.—The following drink for relieving sickness of the stomach is said to be very palatable and agreeable. Beat up one egg very well, say for twenty minutes, then add fresh milk, one pint; water, one pint; sugar to make it palatable; boil, and get it cool; drink when cold. If it becomes curds and whey, it is useless.

Neck (Enlarged)—to cure.—To cure enlarged neck take two tablespoonfuls of salt, two of borax, and two of alum; dissolve in two of water, and apply three times a day for three days.

Nervousness.—This unhealthy state of system depends upon general debility. It is often inherited from birth, and as often brought on by excess of sedentary occupation, overstrained employment of the brain, mental emotion, dissipation, and excess. The nerves consist of a structure of fibers or cords passing through the entire body, branching off from, and having a connection with each other, and finally centers on the brain. They are the organs of feeling and sensation of every kind, and through them the mind operates upon the body. It is obvious, therefore, that what is termed the "nervous system" has an important part in the bodily functions; and upon them not only much of the health, but happiness, depends.

Treatment.—The cure of nervous complaints lies rather in moral than in medical treatment. For, although much good may be effected by tonics, such as bark, quinine, etc., there is far more benefit to be derived from attention to diet and regimen. In such cases, solid food should preponderate over liquid, and the indulgence in warm and relaxing fluids should be especially avoided; plain and nourishing meat, as beef or mutton, a steak or chop, together with half a pint of bitter ale or stout, forming the best dinner. Cocoa is preferable to tea; vegetables should be but sparingly eaten. Sedentary pursuits should be cast aside as much as possible, but where they are compulsory, every spare moment should be devoted to out-door employment and brisk exercise. Early bedtime and early rising will prove beneficial, and the use of the cold shower bath is excellent. Gymnastic exercises, fencing, horse-riding, rowing, dancing, and other pursuits which call forth the energies, serve also to brace and invigorate the nervous system. It will also be as well to mingle with society; frequent public assemblies and amusements, and thus dispel that morbid desire for seclusion and quietude which, if indulged in to excess, renders a person unfitted for intercourse with mankind, and materially interferes with advancement in life.

Net—how to wash.—Net should be washed in a lather of fine soap and warm water, then dipped in water very slightly blued, and again dipped in either sugar and water, weak starch, or gum arabic and water; it must be pinned out to dry after being well clapped with the hand. This clapping is one of the great secrets of clear starch-

ing; nothing clears nets, muslins, etc., better, for it removes the sticky portion of the stiffening matter without lessening its crispness. Net should be ironed on the wrong side with a very hot iron, which brings up the stiffness; but ironing renders tarlatan limp.

Neuralgia Cures.—A noted cure for neuralgia is hot vinegar vaporized. Heat a flat-iron sufficiently hot to vaporize the vinegar; cover this with some woolen material, which is moistened with vinegar, and the apparatus is then applied at once to the painful spot. The application may be repeated until the pain disappears.

2. For neuralgia and rheumatism, two tablespoonfuls each of beef's gall, laudanum, spirits of turpentine, hemlock oil, half pint alcohol, mix all together. Apply three or four times a day.

3 A few years ago when in China, I became acquainted with the fact of the native, when suffering with facial neuralgia, using oil of pepperment, which they lightly applied to the seat of pain with a camel's-hair pencil. Since then, in my own practice, I frequently employ this oil as a local anæsthetic, not only in neuralgia, but also in gout, with remarkably good results.

4. Neuralgia and toothache are sometimes speedily relieved by applying to the wrist a quantity of bruised or grated horseradish.

5. What is said to be a sure cure for this horrible ailment is nothing but a poultice and tea made from the common field-thistle. The leaves are macerated and used on the parts affected, as a poultice, while a small quantity of the leaves are boiled down to the proportion of a quart to a pint, and a small wineglassful of the decoction drank before each meal.

6. Persons troubled with neuralgia will find this a cure, if they try it: Two drops of laudanum in half a teaspoonful of warm water, and dropped into the ears. It will give immediate relief.

7. For neuralgia in the head, have a flannel cap made to fasten under the chin; wear three nights; let three nights pass, then put on again if necessary.

8. For neuralgia in the eyebrows, bind a strip of flannel around the head; rub the teeth with equal parts of salt and alum, pulverized, on a soft, wet bit of linen.

Neuralgia and Sciatica.—An English officer, who served with distinction in the war with Napolean, was once laid up in a small village in France with a severe attack of sciatica. It so happened that at that time, a tinman was being employed at the hotel where he lodged, and that this tinman, having been himself a soldier, took an interest in the officer's case, and gave him the cure which in this instance succeeded immediately and forever, and which I am about to set down. It is, at any rate, so simple as to be worth a trial. Take a moderate sized potato, rather large than small, and boil it in one quart of water. Foment the part affected with the water in which the potato has been boiled as hot as it can be borne at night before going to bed; then crush the potato and put it on the affected part as a poultice. Wear this all night, and in the morning heat the water, which

should have been preserved, over again, and again foment the part with it as hot as can be borne. This treatment must be persevered with for several days. It occasionally requires to be continued for as much as two or three weeks, but in the shorter or longer time it has never yet failed to be successful.

Neuralgia and Rheumatism—king of oils for.—Burning fluid, one pint; oils of cedar, hemlock, sassafras and origanum, of each two ounces; carbonate of ammonia, pulverized, one ounce; mix. Directions: Apply freely to the nerve and gums around the tooth; and to the face in neuralgic pains, by wetting brown paper and laying it on the parts, not too long, for fear of blistering; to the nerves of teeth by lint.

Neuralgia—internal remedy.—Sal ammoniac, one-half dram; dissolve in water, one ounce. Dose, one tablespoonful every three minutes for twenty minutes, at the end of which time, if not before, the pain will have disappeared.

Nickel Plating—to polish.—Take the finest of coal ashes—you will find deposits as fine as flour in your stove, and sift through muslin. Dip a soft cloth in kerosene, then in the ash dust, and rub vigorously on the plating. Dry and polish with a woolen cloth.

Nickel Ornaments—to polish.—Nickel ornaments on stoves, etc., may be kept bright by using ammonia and whiting. Mix together in a bottle and apply with a cloth. A very little polishing gives a fine luster. It is good for silver-plated ware as well. We use pumice powder to polish tin pans when we use anything.

Night Sweats.—Drink freely of cold sage tea; said to be a certain remedy; or, take elixir of vitriol in a little sweetened water. Dose, from twenty to thirty drops.

Nipples (Cracked)—to cure.—Glycerine and tannin, equal weights, rubbed together into an ointment, is very highly recommended, as is also mutton tallow.

Nipples (Sore).—Pour boiling water on nutgalls (oak bark if galls cannot be obtained), and when cold, strain it off, and bathe the parts with it, or dip the cloth in the tea, and apply it; or twenty grains of tannin may be dissolved in an ounce of water, and applied. The application of a few drops of collodion to the raw surface is highly recommended. It forms, when dry, a perfect coating over the diseased surface.

Nitrous Oxide, or Laughing Gas.—Take two or three ounces of nitrate of ammonia in crystals and put it into a retort, taking care that the heat does not exceed five hundred degrees; when the crystals begin to melt, the gas will be produced in considerable quantities. The gas may also be procured, though not so pure, by pouring nitric acid, diluted with five or six times it weight of water, on copper filings or small pieces of tin. The gas is given out till the acid begins to turn brown; the process must then be stopped.

Nitrate of Silver.—Pure silver, one and one-half ounces; nitric acid, one ounce, diluted with water, two ounces; heat by a sand bath

until ebullition ceases, and the water is expelled; then pour into molds. This substance must be kept from the light.

Nose Bleeding—remedies for.—1. While going down Broadway, New York, blood commenced running from my nose quite freely. I stepped aside and applied my handkerchief, intending to repair to the nearest hotel, when a gentleman accosted me, saying: "Just put a piece of paper in your mouth, chew it rapidly, and it will stop your nose bleeding." Thanking him rather doubtfully, I did as he suggested, and the flow of blood ceased almost immediately. I have seen the remedy tried since quite frequently, and always with success. Doubtless any substance would answer the same purpose as paper, the stoppage of the flow of blood being caused, no doubt, by the rapid motion of the jaws, and counter action of the muscles and arteries connecting the jaws and mouth.

2. Physicians say that placing a small roll of paper or muslin above the front teeth, under the upper lip, and pressing hard on the same will arrest bleeding from the nose—checking the passage of blood through the arteries leading to the nose.

3. Lint dipped in nettle juice and put up the nostril has been known to stay the bleeding of the nose when all other remedies have failed. Fourteen or fifteen of the seeds ground into powder and taken daily will cure swelling of the neck, known by the name of *goitre*, without in any way injuring the general health.

Nutrition in Food.—The following is "Poussingault's Scale of Nutritive Equivalents," and shows how many parts of the various articles of food in common use it takes to be equal in nutrition to one hundred parts of wheat flour: Wheat flour, one hundred; wheat, one hundred and seven; barley meal, one hundred and nineteen; barley, one hundred and thirty; white haricots, fifty-six; lentils, fifty-seven; white cabbage, eight hundred and ten; oats, one hundred and seventeen; rye, one hundred and eleven; rice, one hundred and seventy-seven; buckwheat, one hundred and eight; maize, one hundred and thirty; horse beans, forty-four; peas, sixty-seven; potatoes, three hundred and thirteen; carrots, seven hundred and seventy-seven; turnips, one thousand, three hundred and thirty-five.

Oat or Wheat Straw Made Equal to Hay.—Bring ten gallons water to a boiling heat; take it off the fire, and add to it at once three gallons of linseed unground; let it remain till it gets cold; then empty the whole into a cask containing forty-four gallons of cold water, and let it remain for forty-eight hours. At the end of that time, it will be reduced into a thin jelly, like arrow-root. Spread out one-half ton straw, and sprinkle it over regularly with the whole of the liquid from the cask. The stock will eat up as clean, and keep as fat on it, quantity for quantity, as they would do on hay.

Oatmeal—how to cook.—Very often this nutritious article of diet is objectionable because not properly prepared. When it is to be made as food, select the coarse, recently ground meal. To a coffee-cupful add a quart of cold water, and mix in a tin vessel holding at

least two quarts. The vessel should then be placed in a boiler containing water and put upon the fire to cook, stirring frequently and boiled until dry enough to eat as mush, or the meal is well done. It may then be eaten with butter, molasses, milk, cream and sugar, or any other dressing that may be preferred. When thus prepared it will not have that sickly, salvy consistence that makes it objectionable, and people who could not eat it before will now take it with a relish. The finer quality of meal is best adapted to making gruel for acute diseases. People suffering from habitual constipation will find oatmeal once or twice a day a valuable adjunct to other treatment and far preferable to Graham.

Oatmeal Diamonds.—Into cold oatmeal mush work enough wheat meal (Graham flour) to enable you, when well floured, to roll it out one inch thick, and cut into diamonds, say two by three inches. Place in a well-floured tin and bake twenty minutes. Serve warm. The success of this operation depends largely upon its quickness. Much manipulation of the dough makes them hard and tough, but when made up rapidly they will be light, tender and toothsome.

Oatmeal Wafers.—Oatmeal wafers are relished by babies, and older children, too. Take a pint of oatmeal and a pint of water, with almost a teaspoonful of salt; mix and spread on buttered pans; make it just as thin as it is possible, and yet have the bottom of the pan covered; bake slowly.

Oak—spirit graining for.—Two pounds of whiting, quarter of a pound of gold size, thinned down with spirits of turpentine; then tinge your whiting with Vandyke brown and raw sienna, ground fine. Strike out the lights with a fitch dipped in turpentine, tinged with a little color to show the lights. If your lights do not appear clear, add a little more turpentine. Turpentine varnish is a good substitute for the above mentioned. This kind of graining must be brushed over with beer, with a clean brush, before varnishing. Strong beer must be used for glazing up top-graining and shading.

Oak—oil for graining.—Grind Vandyke brown in turpentine, add as much gold size as will set, and as much soft soap as will make it stand the comb. Should it set too quickly, add a little boiled oil. Put a teaspoonful of gold size to half a pint of turpentine, and as much soap as will lie on a twenty-five cent piece, then take a little soda mixed with water and take out the veins.

Oak Rollers—to prepare the ground for.—Stain your white lead with raw sienna and red lead, or with chrome yellow and Venetian red; thin it with oil and turps, and strain for use. When the ground work is dry, grind in beer, Vandyke brown, whiting and a little burnt sienna, for graining color; or you may use raw sienna with a little whiting, umbers, etc.

Oak (Old)—to imitate.—To make an exceedingly rich color for the imitation of old oak, the ground is a composition of stone ochre or orange chrome and burnt sienna; the graining color is burnt umber or Vandyke brown, to darken it a little. Observe that the above

colors must be used whether the imitation is in oil or distemper. When dry varnish.

Oak (Pollard)—to imitate.—The ground color is prepared with a mixture of chrome yellow vermillion and white lead, to a rich light buff. The graining colors are Vandyke brown and small portions of raw and burnt sienna and lake ground in ale or beer. Fill a large tool with color spread over the surface to be grained, and soften with the badger hair brush. Take a moistened sponge between the thumb and finger and dapple round and round in kind of knobs. then soften very lightly ; then draw a softener from one set of knobs to the other while wet, to form a multiplicity of grains, and finish the knots with a hair pencil, in some places in thicker clusters than others. When dry put the top grain on in a variety of directions, and varnish with turps and gold size ; then glaze up with Vandyke and strong ale To finish, varnish with copal.

Odds and Ends.—To cleanse shells, wash them first in cold water, and then boiling milk.

A pinch of common table-salt dissolved in water will relieve a bee-sting.

The powder of a ripe puff-ball is useful in stopping the flow of blood after amputation.

Old boot-tops cut into pieces of the required size, and lined, make good thick iron-holders.

Machine-oil stains can be removed, if, before washing, the spot is rubbed with a cloth wet with ammonia.

Stoves may be looking nicely for some time by rubbing them thoroughly with newspaper every morning.

To prevent the hair from falling out, wet it thoroughly once or twice a week with a weak solution of salt-water.

Kid boots may be nicely cleaned with a mixture of oil and ink ; the oil softens the leather and the ink blackens it.

A little glue dissolved in skim-milk and water will restore the stiffness and luster to crape and make it look like new.

A good powder or snuff which will cure catarrh is made of equal parts of gum arabic, gum myrrh and bloodroot.

Red ants may be exterminated with sprigs of wintergreen or ground-ivy ; wormwood will serve the same purpose for black ants.

Odors from Cooking—to prevent.—Odors from boiling ham, cabbage, onions, etc., may be prevented by putting red pepper pods, or pieces of charcoal into the kettle.

Odors (Offensive)—to destroy.—Copperas, called sulphate of iron, dissolved in water, one-fourth of a pound to a gallon, and poured into a sink-drain as often as needed will keep it sweet. A little chloride of lime, say half a pound to the gallon of water, will have equally as good an effect, and neither of these costs but a few cents.

Oil (Black).—Best alcohol, tincture of arnica, British oil and oil of tar, of each two ounces ; and slowly add sulphuric acid, one-half ounce. These black oils are getting into extensive use as a liniment

and are indeed valuable, especially in cases attended with much inflammation.

Oil (Buffalo).—Take the best lard oil and perfume it well with equal parts of oil garden lavender and oil lemon.

Oil (Balm of Gilead).—Useful for cuts and burns, etc. Take a half-pint bottle and fill one-third of it with the flowers of the common balm of Gilead, lightly packed, and then pour in sweet oil till the bottle is nearly full; shake it occasionally. After a few days it will be fit for use, but it is the better for long keeping; the bottle, however, must be closely stopped.

Oil-Cloths—how to clean.—If you wish to have them look new and nice, wash them with soft flannel and lukewarm water, and wipe them perfectly dry. If you want them to look extra nice, after they are wiped, drop a few spoonfuls of milk over them and rub them with a dry cloth.

Oil (Waterproof) Blacking.—Camphene, one pint; add all the India-rubber it will dissolve; curriers' oil, one pint; tallow, seven pounds; lampblack, two ounces. Mix thoroughly by heat.

Oil of Roses.—Olive oil, one pound; attar of roses, fifty drops; oil of rosemary, twenty-five drops; mix. Another, roses (hardly opened), twelve ounces; olive oil, ten ounces; beat them together in a mortar; let them remain for a few days, then express the oil.

Oil (Macassar).—Olive oil, one pound; oil origanum, one dram; oil rosemary, one scruple; mix.

Oil (Neat's-foot).—After the hair and hoofs have been removed from the feet of oxen, they yield, when boiled with water, a peculiar fatty matter, which is known as neat's-foot oil; after standing, it deposits some solid fat, which is separated by filtration; the oil then does not congeal at thirty-two degrees, and is not liable to become rancid. It is often mixed with other oils. The oil is used for various purposes, such as harness dressing, oiling tower clocks, etc.

Oil (Tallow).—The oil is obtained from tallow by pressure. The tallow is melted, and when separated from the ordinary impurities by subsidence, is poured into vessels and allowed to cool slowly to about eighty degrees, when the stearine separates in granules, which may be separated from the liquid part by straining through flannel, and is then pressed, when it yields a fresh portion of liquid oil. It is used in soap manufacture, etc.

Oil (Lard).—Lard oil is obtained from hog's lard by pressure, when the liquid part separates, while the lard itself becomes much harder. According to Braconet, lard yields 0.62 of its weight in this oil, which is nearly colorless. It is employed for greasing wool, and other purposes.

Oil-paintings—to clean.—1. Oil-paintings on canvas or panel are best cleaned by washing with soap and soft water just warm. When wiped dry with a soft cloth, they should be rubbed with a warm silk handkerchief before the fire. An immediate brightness may be given

to any very dull oil-paintings by gently wiping the surface over with a fresh-cut onion.

2. To clean, dissolve a small quantity of salt in stale urine; dip a woolen cloth in the mixture, and rub the paintings over with it till they are clean; then wash them with a sponge and clean water; dry them gradually, and rub them over with a clean cloth. Should the dirt not be easily removed by the above application, add a small quantity of soft soap. Be very careful not to rub the paintings too hard.

Oil-paintings—to renew.—The blackened lights of old pictures may be instantly restored to their original hue by touching them with deutoxide of hydrogen diluted with six or eight times its weight of water. The part must be afterward washed with a clean sponge and water.

Oil-cloth—to polish.—Wash it clean in luke-warm water, using a scrubbing brush, then rub it with a woolen cloth wrung out of skim-milk.

Oil Liniments.—1. In cases of whooping-cough and some chronic bronchitic affections, the following liniment may be advantageously rubbed into the chest and along the spine. Spirits of camphor, two parts; laudanum, half a part; spirits of turpentine, one part; castile soap in powder, finely divided, half an ounce; alcohol, three parts. digest the whole together for three days, and strain through linen. This liniment should be gently warmed before using.

2. A powerful liniment for all rheumatic pains, especially when affecting the loins, is the following: Camphorated oil and spirits of turpentine, of each two parts; water of hartshorn, one part; laudanum, one part; to be well shaken together.

3. Another very efficient liniment or embrocation, serviceable in chronic painful affections, may be conveniently and easily made as follows Take of camphor, one ounce; cayenne pepper, in powder, two teaspoonfuls, alcohol, one pint. The whole to be digested with moderate heat for ten days, and filtered. It is an active rubificant; and after a slight friction with it, it produces a grateful thrilling sensation of heat in the pained part, which is rapidly relieved.

Oil Finishes.—1. Linseed oil, sixteen ounces; black resin, four ounces; vinegar, four ounces; rectified spirits, three ounces; butter of antimony, ten ounces; spirit of salts, two ounces; melt the resin, add the oil, take it off the fire, and stir in the vinegar; let it boil for a few minutes, stirring it; when cool, put it into a bottle, add the other ingredients, shaking all together.

2. Linseed oil, one pint; oil of turpentine, one-half pint; rectified spirits, four ounces; powdered resin, one and one-half ounces; rose pink, one-half ounce; mix.

3. Acetic acid, two drams; oil of lavender, one-half dram; rectified spirits, one dram; linseed oil, four ounces.

4. Linseed oil, one pint; alkanet root, two ounces; heat, strain, and add lac varnish, one ounce.

5. Linseed oil, one pint; rectified spirits, two ounces; butter of antimony, four ounces.

6 Linseed oil, one gallon; alkanet root, three ounces; rose pink, one ounce. Boil them together ten minutes, and strain so that the oil be quite clear.

Oil for Fine Mechanism.—Oil for fine mechanism can be prepared by putting zinc and led shavings, in equal parts, into good Florence olive oil, and placing in a cool place until the oil becomes colorless. Unequaled for sewing machines, etc.

Ointments (Chilblain).—Take of gallnuts, in very fine powder, one dram avoirdupois; spermaceti cerate, seven drams; mix, add pure glycerine, two drams, and rub the whole to a uniform mass. An excellent application to obstinate broken chilblains, particularly when used as a dressing. When the parts are very painful, one ounce of compound ointment of galls may be advantageously substituted for the galls and cerate ordered above.

Ointment (Green).—Honey and beeswax, each one-half pound; spirits of turpentine; one ounce; wintergreen oil and laudanum, each two ounces; verdigris, finely pulverized, one-half ounce; lard, one and one-half pound; mix by a stove fire, in a copper kettle, heating slowly.

Ointment (Healing).—Put a little pure beeswax in a pipkin, and add some fine olive oil; as it melts, add more, till the mixture assumes the consistency of butter. This is good for abraded flesh cuts, chilblains, or any broken surface, which requires to be healed, not drawn.

Ointment and Pills (Holloway's).—Butter, twenty-two ounces; beeswax, three ounces; yellow resin, three ounces; melt; add vinegar of cantharides, one ounce; evaporate, and add Canada balsam, one ounce; oil of mace, one-half dram; balsam of Peru, fifteen drops. *Pills:* Aloes, four parts; myrrh, jalap, and ginger, of each two parts; mucilage to mix.

Ointment (Itch).—Unsalted butter, one pound; burgundy pitch, two ounces; spirits of turpentine, two ounces; red precipitate, one and one-fourth ounces; melt the pitch and add the butter, stirring well together; then remove from the fire, and when a little cool, add the spirits of turpentine, and lastly the precipitate, and stir until cold.

Ointment (Judkin's).—Linseed oil, one pint; sweet oil, two ounces; and boil them in a kettle on coals for nearly four hours, as warm as you can; then have pulverized and mixed borax, one-half ounce; red lead, four ounces, and sugar of lead, one and one-half ounces; remove the kettle from the fire, and thicken in the powder; continue the stirring until cooled to blood heat, then stir in one ounce of spirits of turpentine; and now take out a little, letting it get cold, and if not then sufficiently thick to spread upon thin soft linen as a salve, you will boil again until this point is reached. It is good for all kinds of wounds, bruises, sores, burns, white swelling, rheuma-

tism, ulcers, sore breasts; and even where there are wounds on the inside, it has been used with advantage, by applying a plaster over the part.

Ointment (Magnetic).—1. Lard, raisins cut in pieces, and fine-cut tobacco, equal weights; simmer well together, then strain and press out all from the dregs. This is an excellent ointment for salt-rheum and other skin diseases. It is also good for piles, bruises and cuts.

2. Elder bark, spikenard and yellow dock roots, of each one pound; boil in two gallons of water down to one; then press the strength out of the roots and boil the liquid down to half a gallon; add eight pounds of the best resin, one pound of beeswax and tallow enough to soften. Roll into rolls, and apply by warming and spreading on linen.

Ointments—for piles.—1. Take carbonate of lead, one-half ounce; sulphate of morphia, fifteen grains, stramonium ointment, one ounce; olive oil, twenty drops. Mix, and apply three times a day, or as the pain may require.

2. Powdered nut-gall, two drams; camphor, one dram; melted wax, ten ounces; tincture of opium, two drams. Mix.

Ointment—for old sores.—Red precipitate, one-half ounce; sugar of lead, one-half ounce; burnt alum, one ounce; white vitriol, one-quarter ounce, or a little less; all to be very finely pulverized; have mutton tallow made warm, one-half pound; stir all in, and stir until cool.

Ointment (Sulphur).—Lard, four ounces; flour of sulphur, one and a half ounces; sal ammonia, two drams; essence of lemon, twelve drops; make it into an ointment. Will generally cure the itch, and has no disagreeable smell.

Omelet.—Comparatively few of our housekeepers dare attempt an omelet, but there is nothing difficult about it. The chief cause of failure lies in not having the spider hot enough, or in making an omelet too large for the pan. For a spider eight inches in diameter, not more than four eggs should be used. For an omelet of this size, use four eggs, one teaspoonful of salt, and two tablespoonfuls of cream, or in place of that, use milk. A larger omelet, and very good, is made with six eggs, a scant teacupful of milk; salt and pepper. Beat the yolks alone to a smooth batter, add the milk, salt and pepper, and lastly, the well-beaten whites. Have the frying-pan very hot. Put in a tablespoonful of butter, which should instantly hiss. Follow it quickly with the well-beaten mixture, and do not stir this after it goes in. Cook over a hot fire, and as the egg sets, loosen it from the pan without breaking, to prevent burning. It should cook in about ten minutes. When the middle is set, it is a good plan to place the pan on the high grate in the oven to brown the top. This is not needed if you turn half of the omelet over upon itself before turning the whole from the pan upon a hot dish. Eat while hot.

Omelet—with cold meat.—Almost any cold meat—beef, mutton, chicken, may be chopped fine, seasoned a little, spread upon the ome-

let before it is doubled together, making an excellent dish, and affording variety.

Omelets—to make.—An omelet should have the yolks and whites of the eggs well beaten separately, with a spoonful of milk to each egg added, with salt and pepper to season, and just before placing in a very hot spider, which should have a small piece of butter in it, the whites of the eggs should be added to the yolks and milk. They ought not to be beaten in, but dipped through and through the yolks, etc., then poured into the spider, the part which thickens around the edge lifted back to the center in a heap and taken up just before it is all set. If the butter was hot enough it will be a delicate brown when turned over upon the plate for the table.

Omelet (Government Clerk's).—The following recipe may be found palatable and economical: Take two eggs, beat them well, whites and yolks, and one cupful of milk, in which a tablespoonful of cornstarch has been dissolved; add a little salt and pepper; have butter sufficiently hot in the pan; stir up the omelet while cooking; enough for two persons, and no more.

Omelet (Oyster).—Twelve oysters, if large, double the number if small; six eggs, one cup of milk, one tablespoonful of butter, chopped parsley, salt and pepper; chop the oysters very fine; beat the yolks and whites of the eggs separately, as for nice cake, the whites until they stand in a heap. Put three tablespoonfuls of butter in a frying-pan, and heat while you are mixing the omelet. Stir the milk in a deep dish with the yolks and seasoning. Next add the chopped oysters, beating them well as you add gradually. When thoroughly mixed pour in melted butter, and finally whip in the whites as lightly as possible. Have the butter in the pan very hot, and pour in the mixture. Do not stir it, but when it begins to stiffen slip a broad-bladed knife around the side and cautiously under the omelet, that the butter may reach every part. As soon as the center is fairly set, and the bottom brown, turn out into a hot dish. Lay the dish bottom upward over the frying-pan, which must be turned upside down dexterously. This brings the brown side of the omelet uppermost. This is a delicious breakfast or supper omelet.

Onions—healthful properties of.—Lung and liver complaints are certainly benefitted, often cured, by a free consumption of onions, either cooked or raw. Colds yield to them like magic. Don't be afraid of them. Taken at night all offense will be wanting by morning, and the good effects will amply compensate for the trifling annoyance. Taken regularly they greatly promote the health of the lungs and the digestive organs. An extract made by boiling down the juice of onions to a syrup, and taken as a medicine, answers the purpose very well, but fried, roasted or boiled onions are better. Onions are a very cheap medicine, within everybody's reach, and they are not by any means as "bad to take" as the costly nostrums a neglect of their use may necessitate.

Onions—to peel.—To many persons peeling onions is a most dis-

agreeable operation, and causes the greatest pain in the eyes. All this inconvenience may be avoided and as many onions as you please be peeled with impunity merely by taking a needle or any small piece of polished steel between the teeth during the operation. The steel will attract the acid juice of the onion and save the eyes.

Onions—to pickle.—Choose small round onions remove the skins, steep them in strong brine for a week in a stone vessel, pour it off, and heat till it boils; then pour on the onions, boiling hot; after twenty-four hours, drain on a sieve, then put them in bottles, fill up over them with strong spiced vinegar boiling hot, cork down immediately and wax over the cork. In a similar manner are pickled mushrooms, cauliflowers, samphires, peas, beans, green gooseberries, walnuts, red cabbages (without salt, with cold vinegar). Observe that the soft and more delicate do not require so much soaking in brine as the harder and coarser kinds, and may be often kept by simply pouring very strong pickling vinegar on them without the application of heat.

Onions for Fowls.—Onions are a preventive of and a remedy for many diseases to which domestic fowls are liable. For gaps onions are the best things that can be fed. Give fowls as many as they will eat, chopped fine, as often as three times a week.

Onions—to sprout.—Pour hot water on the seed, let it remain two or three seconds, and they will immediately sprout, and come up much earlier.

Onions—to store.—For storing onions there is no better place than a dry, cool, and airy loft, where they can be spread out thinly, and often looked over for the removal of those which may have begun to decay. Warmth and moisture are fatal to the keeping of onions, and much handling is almost equally so.

Opium and its Uses.—Opium is a stimulant, narcotic, and anodyne Used externally, it acts almost as well as when taken into the stomach, and without affecting the head or causing nausea. Applied to irritable ulcers in the form of tincture, it promotes their cure and allays pain. Clothes dipped in a strong solution, and applied over painful bruises, tumors or inflamed joints, allay pain. A small piece of solid opium stuffed into a hollow tooth relieves toothache. Two drops of the wine of opium dropped into the eye acts as an excellent stimulant in bloodshot eye, or after long-continued inflammation, it is useful in strengthening the eye. Applied as a liniment, in combination with ammonia or oil, or with camphorated spirit, it relieves muscular pain. When combined with oil of turpentine it is useful as a liniment in spasmodic colic. Used internally, it acts as a very powerful stimulant, then as a sedative, and finally as an anodyne and narcotic, allaying pain in the most extraordinary manner, by acting directly upon the nervous system.

In acute rheumatism it is a most excellent medicine, when combined with calomel and tartarate of antimony, but its exhibition requires the judicious care of a medical man.

Doses of the various preparations.—Confection of opium, from five grains to half a dram; extract of opium, from one to five grains (this is a valuable form, as it does not produce so much after-derangement of the nervous system as solid opium); pills of soap and opium, from five to ten grains; compound ipecacuanha powder (Dover's powders), from five to twenty grains; compound kino powder, from five to twenty grains; wine of opium, from ten minims to one dram.

Caution.—Opium is a powerful poison when taken in too large a quantity and therefore should be used with extreme caution.

Opodeldoc (Liquid).—Warm brandy, one quart; add to it gum camphor, one ounce; sal ammoniac, one-quarter of an ounce; oils of origanum and rosemary, each one-half ounce; oil wormwood, one-quarter ounce; when the oils are dissolved, add six ounces of soft soap.

Oranges—promote health.—A well-known physician said to us once: "Let children eat one or two oranges every morning before breakfast through the spring season, and they will need no medicine during the rest of the year." If good for children, why not for older people as well?

Orchards (Old)—to renew.—It is very well known that the reason why peach apple, quince and pear orchards gradually grow poorer and poorer until they cease to produce at all, is because the potash is exhausted from the soil by the plant. This potash must be restored, and the most effective way to do it is to use the following compound, discovered by a distinguished German chemist: Thirty parts of sulphate of potash, fifteen parts sulphate of magnesia; thirty-five parts salt; fifteen parts gypsum (plaster of Paris); five parts chloride of magnesia. This should be roughly powdered and mixed and then mingled with barnyard manure, or dug in about the roots of the trees. From ten to twenty pounds to a tree are quite enough.

Orchards—to renew.—Early in the spring, plough the entire orchard, and enrich the whole soil with a good dressing of compost of manure, swamp-muck, and lime; scrape off the old bark with a deck-scraper, or a sharp hoe; apply half a bushel of lime, and the same of ground charcoal round each tree. Then apply diluted soft soap, or strong sop-suds, on the trunks and limbs, as high as a man can reach. When the trees are in full bloom, throw over them a good proportion of fine slaked lime, and you will reap abundant fruits from your labors.

Orchards—to cultivate.—One of the most successful fruit growers of this section gave me his plan of cultivating his orchard. He plows his orchard one way, leaving strips close to the trees about eight feet wide, and plants potatoes, covering them with straw. In the fall, when he digs his potatoes, he piles the straw, and the next spring he plows the ground crosswise, and plants again, using the same straw. After the straw has been used two years, it is turned under in the fall, to manure the ground. In this way his orchard is manured with very little trouble, and he cultivates his orchard at the same time. He

says that he does not believe, from his own experience, that it is good for fruit trees to have the plow run any closer than four feet on each side, but thinks it better to cultivate in this way between the rows than to seed down to grass and pasture.

Ornament—for mantelpiece.—An ornament may be obtained by suspending an acorn by a piece of thread tied around it, within half an inch of the surface of some water contained in a vase, tumbler or saucer, and allowing it to remain undisturbed for several weeks. It will soon burst open, and small roots will seek the water; a straight and tapering stem, with beautiful, glossy green leaves will shoot upward and present a very pleasing appearance. Chestnut trees may be grown in the same manner, but their leaves are not so beautiful as those of the oak. The water should be changed once a month, taking care to supply water of the same warmth; bits of charcoal added to it will prevent the water from souring. If the little leaves turn yellow, put a grain of nitrate of ammonia in the utensil which holds the water, and it will renew their luxuriance.

Ornament for Table.—One-half dozen eggs; make a hole at one end and empty the contents; fill up with cornstarch made stiff. When cold strip off the shells; pare lemon rind very thin, boil till tender, then cut in narrow strips like straw, and lay in powdered sugar; fill a deep dish half full with either cold custard or wine jelly, put the eggs together in the center, and lay the straws nest-like around them.

Ostrich Feathers—to clean.—White or light tinted ones can be laid on a plate and scrubbed gently with a toothbrush, in warm soapsuds, then well shaken out and well dried either by the hot sun or a good fire. At first the feather will have a most discouraging appearance, and a novice is apt to think it perfectly spoiled. But after it is perfectly dry it should be carefully curled with a penknife or scissors blade, and it will recover all its former plumy softness.

Ostrich Feathers (White)—to clean.—To clean a white ostrich feather, put one ounce Castile soap in one pint of water. Wash the feather in this, and rinse in pure water.

Ottoman—to make.—A neat and useful ottoman may be made by taking a box in which fine-cut tobacco is packed and covering it with cretonne. The top may be taken off and put on without difficulty, if, after covering, a narrow ruffle to fall over the edge is tacked on. An ottoman of this sort is convenient in the bedroom, where it may serve as a receptacle for stockings. If one does not care to buy cretonne, bits of carpet may be used for the covering.

Oven-holders—to make.—Oven-holders, for taking out bread, meat, etc., are made two and one-half feet long, by one foot wide, of coffee sacking, first boiling it in ashes to soften and then washing it, or of three or four thicknesses of old cotton cloth. They are a great necessity. Have three or four of them, or better, half a dozen, can be washed each week. Keep those in use on nails be-

side stove, and it is handy to have a smaller one with a loop and tied with a tape to the apron binding of the cook.

Overshoes—to make.—Very nice overshoes can be made of double zephyr, or coarse domestic yarn. Set up forty stitches on three large steel needles, join; knit two plain and two stitches seam, all around till two inches have been knit, then commence to narrow in the center of one needle; on each side of two plain stitches, narrow on the right side, slip and bind on the left. Do thus every time you come around to it, till there are but twenty stitches left on each needle; knit two or three inches more, two plain and two seam, and bind off. They are nice to wear when riding in cold weather.

Oysters (Imitation).—I wish to tell those who are fond of oysters of a way I have learned of preparing corn oysters, which have a taste similar to real fried oysters; and are equal, if not superior to the bivalves themselves. Grate six ears of sweet corn (the proper age for boiling), add two beaten eggs, a little salt and pepper. Drop spoonfuls into your hot, well buttered frying-pan, fry and turn the same as oysters, browning nicely on both sides, and you have a dish which you cannot but pronounce excellent.

Oysters—to broil.—Use a double gridiron that folds together; grease the bars, which prevents sticking; then dip each oyster into melted butter, place them on the iron enough to cover it, have a brisk fire and broil; constantly baste with butter; when done, serve on very hot toast on hot dishes. Use no cracker or crumbs of any kind.

Oysters (Fried).—Use for frying the largest and best oysters you can get. Take them from the liquor, lay them in rows upon a clean cloth and press another lightly upon them to absorb the moisture; have ready some beaten eggs and some bread-crumbs. Heat enough butter in the pan to cover the oysters. Dip each one in the egg first, then into the crumbs, rolling it over, that it may be completely covered. Drop them into the frying-pan and fry quickly to a light brown. Do not let them remain in the pan an instant after they are done. Serve dry, on a hot dish.

Oyster Omelet.—An oyster omelet may be a new dish to some cooks, and I can assure them that it will be a favorite if the family likes oysters. Stew a dozen oysters in their own liquor, if possible; if not, use a very little water; roll two or three lumps of butter the size of butternuts in flour, and put in and let it come to a boil; salt it well, and black or cayenne pepper to suit your taste. Take out the oysters and chop them, and if necessary to make it thick, add a little flour to the sauce; then put the oysters in, and set the saucepan in which they are on the back part of the stove. Beat your eggs until very light, and add to them two tablespoonfuls of cream or rich milk; fry in a well-buttered frying-pan. When done, remove to a hot platter or a deep plate, and pour the oyster sauce over it. Serve while hot.

Oysters—new ways of preparing them.—The ways of preparing oysters are not many. This method, however, is not widely known:

Take two dozen oysters and throw them in a large deep dish; then take a small bunch of parsley chopped fine, a little lemon rind grated, half a nutmeg grated, and the crumbs of a stale French roll, also grated; let the latter be well incorporated, adding some cayenne. Have in readiness the yolks of three fresh eggs beaten up into a foam; dip each oyster separately into the eggs and roll them into the bread crumbs until they are all covered with a good coat. Put a quarter of a pound of butter in the oven till it is melted while arranging the oysters in the pan, then turn them continually until they assume a perfect brown and crusty appearance. When fully cooked serve them with some celery, salt, and thin slices of Graham bread and butter.

Oysters (Pickled).—Select the largest oysters, drain off their liquor, and wash them in clear water; put them in a stew-pan with water proportioned to the number of oysters, some salt, blades of mace, and whole black pepper. Stew them a few minutes, and then put them in a pot, and when cold, add as much pale vinegar as will give the liquor an agreeable acid.

Oyster Sauce.—The oysters are to be bearded and scalded, then strain the liquor and thicken it with a little flour and butter, adding lemon juice in small quantity, and a few tablespoonfuls of cream; heat the oysters well in this mixture, but do not let them boil; some persons add spices in making oyster sauce, in which case it must be left longer on the fire, simmering gently, but never being allowed to boil.

Pails (Wood)—to cleanse.—To take the woody taste out of a wooden pail, fill the pail with boiling hot water; let it remain until cold, then empty it and dissolve some soda in lukewarm water, adding a little lime to it, and wash the inside well with the solution; after that scald with hot water and rinse well.

Pain in the Feet—to cure.—If your feet become painful from walking or standing too long, put them into warm salt and water mixed in the proportion of two large handfuls of salt to a gallon of water. Sea water made warm, is still better. Keep your feet and ankle in the water until it begins to feel cool, rubbing them well with your hands. Then wipe them dry and rub them long and hard with a coarse towel. Where the feet are tender and easily fatigued, it is an excellent thing to go through this practice regularly every night, also on coming home from a walk. With perseverance this has cured neuralgia in the feet.

Pain Extractor.—Spirits of ammonia, one ounce; laudanum, one ounce; oil of origanum, one ounce; mutton tallow, half pound; combine the articles with the tallow when it is nearly cool.

Paint—to remove from windows.—To remove paint from windows, take strong bicarbonate of soda and dissolve it in hot water. Wash the glass, and, in twenty minutes or half an hour, rub thoroughly with a dry cloth. Paint, varnish or japan may be softened

or easily removed from old surfaces with a solution of caustic soda.

Paint Cleaner.—Provide a plate with some of the best whiting to be had, and have ready some clean warm water and a piece of flannel, which dip into the water and squeeze nearly dry; then take as much whiting as will adhere to it, apply it to the painted surface, when a little rubbing will instantly remove any dirt or grease. After which wash the part well with clean water, rubbing it dry with a soft chamois. Paint thus cleaned looks as well as when first laid on, without any injury to the most delicate colors. It is far better than using soap, and does not require more than half the time and labor.

Paint—mixture for cleaning.—Dissolve two ounces of soda in a quart of hot water, which will make a ready and useful solution for cleaning old painted work preparatory to repainting. The mixture in the above proportions should be used when warm, and the woodwork afterward washed with water to remove the remains of the soda.

Painting Walls.—Before paint or kalsomine is applied to walls, every crevice should be filled with plaster or cement. For the kalsomine put a quarter of a pound of white glue in cold water over night, and heat gradually in the morning until dissolved. Mix eight pounds of whiting with hot water, add the dissolved glue and stir together, adding warm water until about the consistency of thick cream. Use a kalsomine brush, and finish as you go along. If skim milk is used instead of water, the glue may be omitted.

Paint—to remove from a wall.—If you intend papering a painted wall, you must first get off the paint, otherwise the paper will not stick. To do this, mix in a bucket with warm water a sufficient quantity of pearlash or potash, so as to make a strong solution. Dip a brush into this, and with it scour off all the paint, finishing with cold water and a flannel.

Paint (Old)—to remove.—Cover with a wash of three parts quick stone lime, slaked in water, to which one part pearlash is added. Allow the coating to remain sixteen hours, when the paint may be easily scraped off.

Paint—for damp walls.—A good metallic paint mixed in pure linseed oil will protect a wall from dampness as well as any paint can do it.

Paint (New)—to remove odor.—Newly painted rooms are very unpleasant for many days, but if a handful of hay be strewn on the floor upon which is sprinkled a little chloride of lime, after a couple of hours the offensive smell will have entirely disappeared.

Paint for Black Boards in Schools.—Common glue, four ounces; flour of emery, three ounces; and just lampblack enough to give an inky color to the preparation. Dissolve the glue in three-fourths of a pint of warm water, put in the lampblack and emery, stir till there are no lumps, then apply to the board with a woolen rag smoothly rolled. Three coats are amply sufficient.

Painting Banners.—Lay out the letters very accurately with charcoal or crayon, then saturate the cloth with water to render the painting easy. On large work a stencil will be found useful. Take a piece of tin, lay the straight edge to the mark, brush over with a sash tool, and by this means you will make a very clean-edged letter. Use stiff bristle pencils in painting on canvas.

Painters' Cream.—Pale nut oil, six ounces; mastic, one ounce; dissolve; add sugar of lead, one-fourth of an ounce, previously ground in the least possible quantity of oil; then add of water quantity sufficient gradually, until it acquires the consistency of cream, working it well all the time. Used to cover the unfinished work of painters. It will wash off with water.

Paint for Buildings.—There are buildings that were painted in this way fifteen years ago, and still look well. It is considered equal to, if not better than, pure oil: One gallon of soft water, one gallon of soft soap, one gallon of oil; put in a kettle and bring to a boil; remove from the fire; let it stand till only warm, then mix in your paint the same as you would if clear oil. Apply warm. One coat will last a great many years.

Paint (Compound Iron).—Finely pulverized iron filings, one part; brick dust, one part, and ashes, one part. Pour over them glue-water or size, set the whole near the fire, and, when warm, stir them well together. With this paint cover all the woodwork which may be in danger; when dry, give a second coat, and the wood will be rendered incombustible.

Paint (Hard Drying).—Grind Venetian red, or any other color you wish, in boiled oil; then thin it with black japan. It will dry very hard for counter tops, etc.

Paint for Farmers.—Farmers will find the following profitable for house or fence paint: Skim milk, two quarts; fresh slaked lime, eight ounces; linseed oil, six ounces; white burgundy pitch, two ounces; Spanish white, three pounds. The lime is to be slaked in water, exposed to the air, and then mixed with about one-fourth of the milk; the oil in which the pitch is dissolved to be added a little at a time, then the rest of the milk, and afterward the Spanish white. This is sufficient for twenty-seven yards, two coats. This is for white paint. If desirable, any other color may be produced; thus, if cream color is desired, in place of the part of Spanish white use the other alone.

Paint (Spruce Yellow)—for floors.—One quart of water, four ounces of glue, three pounds of spruce yellow; dissolve the glue by putting the water cold upon the glue the night before, then heat in the morning, being careful not to scorch it; paint while hot; add more water if too thick; dry three hours, then oil; use in twenty-four hours.

Paint (Flexible)—for canvas.—Yellow soap, two and one-half pounds; boiling water, one and one-half gallons; dissolve; grind the solution while hot with good oil paint, one and one-quarter cwt.

Paint (Beautiful Green)—for walls.—Take four pounds Roman

vitriol, and pour on it a teakettleful of boiling water. When dissolved, add two pounds pearlash, and stir the mixture well with a stick until the effervescence ceases; then add one-fourth pound pulverized yellow arsenic, and stir the whole together. Lay it on with a paint brush; and if the wall has not been painted before, two or even three coats will be requisite. If a pea-green is required, put in less, if an apple-green, more of the yellow arsenic. This paint does not cost the quarter of oil paint, and looks better.

Paint—to imitate tortoise shell.—Paint a ground of salmon color; then when dry and smoothed off, coat it over with rose pink, mixed in varnish and turpentine; then with a flat piece of glass press on the surface, and remove the glass quickly, being careful not to push it over the paint so as to disturb the curious figures which the pressure will form thereon. Varnish when dry, and you will find you have a beautiful imitation of tortoise shell.

Painting Houses—the best season for.—The outside of buildings should be painted during autumn or winter. Hot weather injures the paint by drying in the oil too quickly; then the paint will easily rub off. But when the paint is laid on during the cold weather, it hardens in drying, and is firmly set.

Paint for Magic Lantern Sides.—Transparent colors only are used for this work, such as lakes, sap-green, ultramarine, verdigris, gamboge, asphaltum, etc., mixed in oil, and tempered with light colored varnish (white Demar). Draw on the paper the design desired, and stick it to the glass with water or gum; then with a fine pencil put the outlines on the opposite side of the glass with the proper colors; then shade or fill up with black Vandyke brown, as you find best.

Paint (Milk)—for barns—any color.—Mix water lime with skimmilk to a proper consistence to apply with a brush, and it is ready to use. It will adhere well to wood, whether smooth or rough, to brick, mortar or stone, where oil has not been used (in which case it cleaves to some extent), and forms a very hard substance, as durable as the best oil paint. It is too cheap to estimate, and any one can put it on who can use a brush. Any color may be given to it by using colors of the tinge desired. If a red is preferred, mix Venetian red with milk, not using any lime. It looks well for fifteen years.

Paint—to make without lead or oil.—Whiting, five pounds; skimmed milk, two quarts; fresh slaked lime, two ounces. Put the lime into a stoneware vessel, pour upon it a sufficient quantity of milk to make a mixture resembling cream; the balance of the milk is then to be added; and lastly, the whiting is to be crumbled upon the surface of the fluid, in which it gradually sinks. At this period it must be well stirred in or ground, as you would other paint, and it is fit for use.

Paint Odors—to get rid of.—Place a vessel full of lighted charcoal in the middle of the room, and throw on it two or three handfuls of juniper berries; shut the windows, the chimney, and the door

close; twenty-four hours afterward, the room may be opened, then it will be found that the sickly unwholesome smell will be entirely gone. The smoke of the juniper berry possesses this advantage, that should anything be left in the room, such as tapestry, etc., none of it will be spoiled.

Paint for One Cent a Pound.—To one gallon of soft, hot water, add four pounds sulphate of zinc (crude). Let it dissolve perfectly, and a sediment will settle at the bottom. Turn the clear solution into another vessel. To one gallon of paint (lead and oil), mix one gallon of the compound. Stir it into the paint slowly for ten or fifteen minutes, and the compound and paint will perfectly combine. If too thick thin it with turpentine.

Paint (Durable Outside).—Take two parts (in bulk) of water lime, ground fine; one part (in bulk) of white lead, in oil. Mix them thoroughly by adding best boiled linseed oil, enough to prepare it to pass through a paint-mill; after which temper with oil till it can be applied with a common paint brush. Make any color to suit. It will last three times as long as lead paint. It is superior.

Painting Oil-cloths.—To paint canvas for floors, the canvas should first be saturated with glue-water or flour paste, and allowed to dry first. Then paint it with any color desired. To put in the figures, cut out designs in tin plates or stiff paper, and stencil them on various colors.

Paint Without Oil or Lead.—Slake stone-lime with boiling water in a tub or barrel to keep in the steam; then pass six quarts through a fine sieve. Now, to this quantity add one quart of coarse salt and a gallon of water; boil the mixture, and skim it clear. To every five gallons of this skimmed mixture add one pound alum; one-half pound copperas; and by slow degrees three-quarters pound potash, and four quarts sifted ashes or fine sand; add any fine coloring desired. A more durable paint was never made.

Paint (White).—For inside work, which ceases to smell, and dries in a few hours: Add one pound of frankincense to two quarts turpentine; dissolve it over a clear fire, strain it, and bottle it for use; then add one pint of this mixture to four pints bleached linseed oil, shake them well together, grind white lead in spirts of turpentine, and strain it; then add sufficient of the lead to make it proper for painting; if too thick in using, thin with turpentine, it being suitable for the best internal work on account of its superiority and expense.

Paint (Common White)—to mix.—Mix or grind white lead in linseed oil to the consistency of paste; add turpentine in the proportion of one quart to the gallon of oil; but these proportions must be varied according to circumstances. Remember to strain your color for the better sort of work. If the work is exposed to the sun, use more turpentine for the ground-color to prevent its blistering.

Paint Skins—to utilize.—Dissolve sal-soda, one-half pound, in rain water, one gallon; cover the refuse paint for two days, then heat

it, adding oil to reduce it to a proper consistence for painting and straining.

Painters' Hints.—PAINTERS' COLIC.—To two and one-half gallons spruce or table beer add one dram of sulphuric acid, mix well and let it stand three hours. A tumblerful two or three times per day is said to be very beneficial in cases of lead colic. Sweet oil and milk are also good, but acids, fruits, spirituous liquors, and vinegar should be avoided in every illness caused by paint. Avoid inhaling the dust when handling dry colors, or drinking water which has stood long in a painted room or paint shop. Never eat or sleep without washing the hands and face, and rinsing the mouth, cleaning well out under the nails. Bathe the whole body every few days, avoid spattering your clothes, and either wear overalls or change your garments every week, well airing those you put off. Keep your paint shop clean, well-ventilated, and avoid sleeping in it at any time.

TO REMOVE PAINT FROM CLOTHING.—Saturate the spots with equal parts turpentine and spirits of ammonia until they become soft, then wash out with soap-suds.

TO DISSOLVE PAINT SKINS, CLEANING OF POTS, BRUSHES, ETC.—Save them carefully, and dissolve them by boiling them in oil.

TO CLEAN BRUSHES.—Use turpentine first, then wash in warm soap-suds.

TO CLEAN PAINT PAILS, ETC.—Use strong lye, hot.

SANDING.—The perforated sprinkler of a watering-pot attached to the nozzle of a pair of bellows is a first-rate contrivance for applying sand to painted work. Apply on the fourth or fifth coat, with another coat on the sand. To remove old putty, apply nitric or muriatic acid.

Pancakes (Apple).—Two cupfuls of sweet milk, one egg, four tablespoonfuls of sugar; one-half teaspoonful of soda, one-half teaspoonful of salt, and flour enough to make a little thicker than griddles. Two good-sized apples, pleasantly sour, pare and slice into the batter. Drop into hot fat. Nice for breakfast.

Panes of Glass—to remove.—A safe and easy method for removing panes of glass is to apply softsoap to the putty, which, in a few hours, will soften it, however hard it may be, sufficiently for a knife to cut it without fear of breaking the glass.

Pansy (The)—how to grow.—The pansy delights in a cool, rich loam; the richer, the larger will be the flowers, in a partially shaded situation. It never flourishes as well during the hot days of July and August as later in the season. Young plants, from seeds sown early in the spring, if the bed be very rich, will come into handsome bloom during the latter part of June. All the first blossoms should be picked off that the plant may first become robust. Even with the old plants, the great secret of keeping them in constant bloom is to pick off the blossoms early and constantly, since it weakens the plant more to ripen one seed-pod than to yield a dozen flowers.

Papering and Painting.—Papering and painting are best done in

cold weather, especially the latter, for the wood absorbs the oil of paint in warm weather, while in cold weather the oil hardens on the outside, making a coat which will protect the wood instead of soaking into it.

Paper—to fumigate.—Dip light paper in a solution of alum; strength of alum, one ounce; water, one pint. Dry thoroughly, and on one side spread a mixture of equal parts of gum benzoin, galbanum, or Peruvian balsam; melt the gums in an earthenware dish and spread with a hot spatula; slips of the paper are held over a light, when the odorous matter will be evaporated, the alum preventing the paper from igniting.

Paper (Dr. Smith's Healing).—Make a strong tincture of capsicum-pods by steeping them for several days, in a warm place, in twice their weight of rectified spirits of wine. Dissolve gum arabic in water to about the consistency of molasses. Add to this an equal quantity of the tincture, stirring it together with a small brush or a large camel's-hair pencil, until they are well incorporated. The mixture will be cloudy and opaque. Take sheets of silk or tissue-paper; give them with the brush a coat of the mixture; let them dry, and then give another; let that dry, and, if the surface is shining, there is enough of the peppered gum; if not, give a third coat. This paper, applied in the same way as court plaster to chilblains that are not broken, and burns that are not blistered, speedily relieves the itching and the pain. It acts like a charm, and effects a rapid cure. The same with cuts and discolored bruises. It likewise allays rheumatic pains in the joints. Its great value is that, besides acting as ordinary sticking-plaster, it abates suffering and hastens the process of healing.

Paper (Magic).—Take lard oil, or sweet oil, mixed to the consistency of cream, with either of the following paints, the color of which is desired: Prussian blue, lampblack, Venetian red, or chrome green, either of which should be rubbed with a knife on a plate or stone until smooth. Use rather thin but firm paper; put on with a sponge, and wipe off as dry as convenient; then lay them between uncolored paper, or between newspapers, and press by laying books or some other flat substance upon them until the surplus oil is absorbed, when it is ready for use.

Paper—to make into parchment.—To produce this transformation, take unsized paper, and plunge it into a solution of two parts of concentrated sulphuric acid combined with one part water; withdraw it immediately, and wash it in clean water, and the change is complete. It is now fit for writing; for the acid supplies the want of size, and it becomes so strong that a strip two or three inches wide will bear from sixty to eighty pounds' weight, while a light strap of parchment will bear only about twenty-five pounds.

Paper (Wall)—how to clean.—To clean wall paper, take off the dust with a soft cloth. With a little flour and water make a lump of stiff dough, and rub the wall gently downward, taking the length of the arm each stroke, and in this way go round the whole room. As

the dough becomes dirty, cut the soiled parts off. In the second round commence the stroke a little above where the last one ended, and be very careful not to cross the paper or to go up again. Ordinary papers cleaned in this way will look fresh and bright, and almost as good as new. Some papers, however, and these most expensive ones, will not clean nicely; and in order to ascertain whether a paper can be cleaned nicely, it is best to try it in some obscure corner where it will not be noticed if the result is unsatisfactory. If there be any broken places in the wall, fill them up with a mixture of equal parts of plaster of Paris and silver-sand, made into a paste with a little water, then cover the place with a piece of paper like the rest, if it can be had.

Paper (Waterproof).—The waterproof oiled paper used so extensively around plants sent by mail, and to tie over pots and jars, and to wrap up ground white lead, etc., is made by simply brushing sheets of paper over with "boiled" oil, after, which they are suspended on a line till dry.

Paper (Paraffine)—to make.—To prepare paraffine paper, dissolve paraffine in benzine, and into the warm solution dip the paper, sheet by sheet; let drip off and dry. On the large scale it may be done by letting paper from a continuous roll pass through such a solution, and then between flannel to absorb the surplus. Wax is best dissolved in carbon disulphide, and paper can thus be made ready for use in five minutes. A good plan is to apply the benzine solution of paraffine by means of a sponge.

Paraffine—as a wood preserver.—A German scientist recommends paraffine as an efficient means of protecting wood against damp, acids, and alkalies. The wood is first well dried, and then covered with a solution of one part melted paraffine in six parts petroleum ether or bisulphide of carbon. The solvent evaporates quickly, leaving the paraffine in the pores of the wood. Great care must be taken in the use of this preparation, since paraffine, as well as petroleum ether or bisulphide of carbon is very inflammable; and even the vapor of the last two mentioned substances, if mixed with air, may give rise to dangerous explosions. Paraffine, melted with equal parts of linseed oil, is also very useful to protect iron from rust.

Paregoric.—Ingredients: One ounce of laudanum, one pint of any kind of spirits, one-half dram of flowers of benzoin, one-half dram of oil of anise, one scruple of camphor. Blend the ingredients well together. Give as a dose, to adults, one or two drams; to children, from two to four years old, fifteen to twenty drops.

Paregoric.—Best opium, three drams; dissolve in about two tablespoonfuls of boiling water; then add benzoic acid, one-half dram; oil of anise, one-half a fluid dram; clarified honey, one ounce; camphor gum, one scruple; alcohol, seventy-six per cent., eleven fluid ounces; distilled water, four fluid ounces; macerate (keep warm) for two weeks. Dose for children, five to twenty drops; adults, one to two teaspoonfuls.

Parlor Magic.—THE TOBACCO-PIPE CANNON.—Take of saltpeter, one ounce; cream of tartar, one ounce; sulphur, half an ounce; beat them to powder separately, then mix them together. Put a grain into a pipe of tobacco, and when it is lighted it will give the report of a musket, without breaking the pipe. By putting as much as may lie on your nail in a piece of paper, and setting fire to it, a tremendous report will be the result.

THE ERRATIC EGG.—Have two wine-glasses. Transfer the egg from one wine-glass to the other, and back again to its original position, without touching the egg or glasses, or allowing any person or anything to touch them. To perform this trick all you have to do, is to blow smartly on one side of the egg, and it will hop into the next glass; repeat this, and it will hop back again.

TO MELT LEAD IN A PAPER.—Wrap up a very smooth ball of lead in a piece of paper, taking care that there be no wrinkles in it, and that it be everywhere in contact with the ball; if it be held in this state over the flame of a taper, the lead will be melted without the paper being burned. The lead, indeed, when ounce fused, will not fail in a short time to pierce the paper, and, of course, run through.

Parsnip (Fried).—Boil, until tender, in hot water slightly salted; let them get almost cold, scrape off the skin and cut in thin, long slices. Dredge with flour and fry in hot dripping, turning as they brown. Drain very dry in a hot colander; pepper and salt and serve.

Parson (Tipsy).—Take a sponge cake baked several days, crumble it up fine, put a layer of it in a glass dish, sprinkle over it a very little wine, then add a large handful of very finely chopped almonds, then a layer of whipped cream, then begin over again by laying another layer of cake crumbs, and go through the same formula, leaving the whipped cream on the top. Any kind of old crumbs will do, but sponge cake is better. Makes an excellent dish for tea, and looks beautiful on the table.

Paste Blacking.—Half a pound of ivory black, half a pound of molasses, half an ounce of powdered alum, one dram of turpentine, one ounce of sulphuric acid, two ounces of raw linseed oil. The ivory black and molasses must first be mixed together until thoroughly incorporated; then add the rest of the ingredients. It keeps best in a bladder.

Paste—to make.—A clean paste may be made of two parts gum tragacanth and one part powdered gum arabic; cover with cold water till dissolved, then reduce to desired consistency with same. A few drops of carbolic acid will prevent sourness.

Paste for Scrap-books, etc.—To make paste for scrap-books, mix smoothly flour and water till a thin batter is formed; put in a pinch of pulverized alum, and pour in boiling water till a thick paste is formed. Let it boil a minute or two; add a few drops of carbolic acid or oil of cloves. Put in a wide-necked bottle.

Paste (Perpetual)—to make.—This paste will remain sweet for a year. Dissolve a teaspoonful of alum in a quart of water, to which add sufficient flour to make a thick cream. Stir in half a teaspoonful of powdered resin and half a dozen cloves to give a pleasant odor. Have on the fire a teacup of boiling water; pour the flour mixture into it, stirring well at the time. In a few minutes it will be of the consistency of mush. Pour it into an earthen vessel; let it cool; lay a cover on, and put it in a cool place. When needed for use, take out a portion and soften it with warm water.

Paste for Paper-hangings, Books, Paper Boxes, etc.—Good wheat flour, sifted, four pounds, make it into a stiff batter with cold water in a pail, beat it well to break the lumps, then add pulverized alum, two ounces. Into this pour boiling water, hissing hot from the fire, stirring the batter thoroughly all the time. As it cooks it swells and loses its white color, and when cold, will make about three-fourths of a pail of thick paste. Thin with cold water to adapt it for easy use with the brush. For painted or varnished walls, add one-half ounce pulverized resin to each two quarts paste, and reduce the mass with thin gum arabic or glue water. A little pulverized corrosive sublimate will enhance the keeping qualities of paste, but alum used as above will do very well.

Paste—for destroying rats and mice.—Melt one pound of lard, with a very gentle heat, in a large-mouthed bottle or other vessel plunged into warm water; then add half an ounce of phosphorous, and one pint of proof spirit; cork the bottle securely, and as it cools shake it frequently, so as to mix the phosphorous uniformly; when cold pour off the spirit (which may be preserved for the same purpose), and thicken the mixture with flour. Small portions of this paste may be placed near the rat holes, and being luminous in the dark it attracts them, is eaten greedily, and is certainly fatal.

Paste (Puff)—to make.—An easy way of making puff paste is to mix the flour with three-quarters of its weight in butter, and milk enough to make it easy to roll. It should not be touched with the hands.

Pasture (Permanent)—profitable to the farmer.—The value of permanent pasture is not appreciated as it should be, and mainly, we apprehend, for want of knowledge and experience. The vast majority of farms have certain pieces or sections which do not pay as they are now managed, but which would yield handsome dividends if properly prepared, put in grass, and used as a permanent pasture. In certain localities, and under certain circumstances, soiling will unquestionably prove profitable, but upon the vast majority of the farms of the country, the time-honored plan of grazing must be depended upon for the summer feeding of the stock. With all the innovations and improvements in farming, it is still true that "fat pastures make fat pockets," and "heavy meadows make happy farmers."

Custom generally sanctions only the growth of timothy, the

clovers, blue grass, and, in a limited way, orchard grass for these purposes; but enlightened research and intelligently conducted experiments have shown that very many more of our great family of grasses can be used to advantage. Thus, in their proper places and seasons, these are the best, "but at the same time there are other sorts which produce feed either before these have come to maturity or after they are done, and which are of equal value for grazing purposes." Among others are rye grass of two or three sorts, red-top, meadow fox-tail, two or three fescues, oat grass, etc., mixtures of which, with those already mentioned, in proportions, suited to the character of the land upon which they are sown, will yield larger and more nutritious crops, lasting through a very much longer season than any one or two of them.

Some of these mature early, others later, occupying the ground at different times, thus lengthening the season, and practically producing several successive crops, not the least advantage of which, perhaps, will be found in keeping the ground covered and shaded at times.

Patchouli—extract of.—Mix one and one-fourth ounce attar of Patchouli, and one-fourth ounce attar of rose with one gallon rectified spirits.

Patterns—to stamp on cloth.—A nice way to stamp any patterns on muslin, canvas or paper, is to procure from the stationery store a sheet of blue tracing paper. It will cost fifteen cents. Place a piece of tracing paper over the goods on which you want the pattern, now put your pattern on the tracing paper with the pattern up, and trace every line with a pencil or anything sharp. Do not move the pattern after you have begun to trace until you have finished, then take up both pattern and paper, and your stamping is completed.

Peaches—to can.—Before paring your peaches dip them a minute or two in boiling water. This will loosen the skin so they will slip off easily, and you will be surprised to know how much time is saved in paring, how smooth the peaches will look, and how many more cans you will have from the same number of peaches than if you pared them in the old wasteful way. The best way to scald them (or tomatoes either) is to fill your wire vegetable boiler with them, and then set that into a kettle of water. By the way, if you do not possess one of these useful articles, I'm sorry for you. They are very cheap, and if you would once use one to boil potatoes or other vegetables in, and find how easy it is to lift this little framework out of the water, you would think you never could go back to the old scalding way of lifting a heavy kettle and pouring the water off the vegetables, with the extreme probability of blistering your nose and both hands with the escaping steam in the dangerous operation, even if the perverse kettle shouldn't give one grand lunge in the wrong direction and spill the entire contents on the floor or in the sink.

Peach Trees—care of.—A fruit-grower has discovered, it is said, that a mulch of tomato vines around peach trees will prevent the at-

tacks of the circulio and other noxious insects—an important discovery if true. It would be easy to test it, and for plum as well as peach trees.

Pearl Water for the Complexion.—Castile soap, one pound; water, one gallon. Dissolve, then add alcohol, one quart; oil of rosemary and oil of lavender, each two drams. Mix well.

Pear Trees—to protect from blight.—A correspondent preserves his pear trees from blight by winding a rope of straw around the trunks so as to completely cover them from the ground to the limbs, keeping it on moderately tight through the season. His theory is that the blight is caused by the rays of the hot sun coming in contact with the body of the tree, heating the sap and causing it to dry up and the bark to grow to the wood of the tree.

Pears—hints on marketing.—Pears, whether early or late, should never remain on the tree until they become mellow. Whenever they have made their growth they should be gathered. It is easy to tell the proper condition by observing the ease with which the stem parts from the tree. If, on taking hold of the pear and lifting it, the stem readily breaks away from the spur to which it is attached, the fruit has received all the nourishment it can get from the tree, and the sooner it is gathered the better. Pears are sent to market in crates and half barrels; especially fine specimens are sent in shallow boxes, only deep enough for a single layer of fruit, and each pear is wrapped in thin white paper. Extra specimens of any of the standard kinds will bring enough more to pay for this extra care in packing. The early varieties mature quicker after gathering than the later kinds, but all should reach the market in a firm and hard condition. As with all other fruits, it will pay to carefully assort pears. Make three lots, firsts and seconds for market, and the third for keeping at home—for the pigs, if need be; there is positively no sale for poor pears.

Peas (Green)—to preserve for winter use.—Gather the peas when plentiful, shell them; then wash and scald them in hot water. When thoroughly drained, put them into bottles, and fill up each bottle with a strong brine; at the top of the bottle pour a thin layer of salad oil. Cork and seal the bottles, which must be quite full and kept upright

Pen-wiper.—Twelves disks of cloth of various colors are edged with crystal beads. The rounds may be of any size wished, according as the pen-wiper is required, large or small. They are then folded in four, and fastened together in the center with a few stitches of strong silk.

Pencils—for writing on glass.—Stearic acid, four parts; mutton-suet, three parts; wax, two parts; melt together and add six parts of red lead, and one part purified carbonate of potassa, previously triturated together; set aside for an hour in a warm situation, stirring frequently; then pour into glass tubes or hollow reeds.

Pencil Marks—to make indelible.—To fix pencil marks so they will not rub out, take well-skimmed milk and dilute with an equal

bulk of water. Wash the pencil marks (whether writing or drawing) with this liquid, using a soft flat camel's-hair brush, and avoiding all rubbing. Place upon a flat board to dry.

Peppersauce—(very appetizing with meats).—Three heads of cabbage, chopped; three or four bell peppers, chopped (seeds taken out); half pint of white mustard seed; three sticks of horseradish, grated; half cup of white sugar; half teaspoonful of alum. Mix together, put in a jar and cover with cold vinegar. Ready for use in a week.

Perfumes—to extract.—The perfumes of different flowers may be extracted by a very simple process, and without any apparatus. Gather the flowers, the perfume of which you desire to obtain, with as little stalk as possible, and place them in a jar three parts filled with olive or almond oil. After twenty-four hours turn them out in a coarse cloth, and squeeze all the oil from them. Throw away the old flowers, and repeat the process with fresh-gathered flowers three or four times, according to the strength of the perfume desired. The oil being thoroughly impregnated with the volatile particles of the flowers, is then to be mixed with an equal quantity of pure rectified spirit, and shaken every day for a fortnight. It may then be poured off, when it will be found beautifully scented and fit for use.

Perfumes (Garden).—Simple garden perfumes are charming in linen when put away in trunks or drawers. To handkerchiefs the perfume is more delicate and much more desirable than the stronger odors so freely used. Always preserve the trimmings of rose-geraniums in envelopes for such purposes, and lay in plenty of sweet clover when in blossom.

Perfumes.—BOUQUET DE LA RHINE.—Take one ounce of essence of bergamot, three drams of English oil of lavender, half a dram of oil of cloves, half a dram of aromatic vinegar, six grains of musk, and one pint and a half of rectified spirit of wine. Distill.

JOCKEY CLUB.—Spirits of wine, five gallons; orange flower water, one gallon; balsam of Peru, four ounces; essence of bergamot, eight ounces; essence of musk, eight ounces; essence of cloves, four ounces; essence of neroli, two ounces.

KISS ME QUICK.—Spirit, one gallon; essence of thyme, one-fourth ounce; essence of orange flowers, two ounces; essence neroli, one-half ounce; attar of roses, thirty drops; essence of jasmine, one ounce; essence of balm mint, one-half ounce; petals of roses, four ounces; oil lemon, twenty drops; calorus aromaticus, one-half ounce; essence neroli, one-fourth ounce. Mix and strain.

UPPER TEN.—Spirits of wine, four quarts; essence of cedrat, two drams; essence of violets, one-fourth ounce; essence of neroli, one-half ounce; attar of roses, twenty drops; orange-flower essence, one ounce; oil of rosemary, thirty drops; oils bergamot and neroli, each one-half ounce.

LADIES' OWN.—Spirits of wine, one gallon; attar of roses twenty drops; essence of thyme, one-half ounce; essence of neroli, one-fourth

ounce; essence of vanilla, one-half ounce; essence of bergamot, one-fourth ounce; orange-flower water, six ounces.

Perspiration—to remove the odor of.—The unpleasant odor produced by perspiration is frequently the source of vexation to persons who are subject to it. Nothing is simpler than to remove this odor much more effectually than by the application of such costly unguents and perfumes as are in use. It is only necessary to procure some compound spirits of ammonia and place about two tablespoonfuls in a basin of water. Washing the face, hands, and arms with this leaves the skin as clean and sweet as one could wish. The wash is perfectly harmless, and very cheap. It is recommended on the authority of an experienced physician.

Perspiring Hands.—The only effective method of preventing excessive perspiration in the hands is to mix club moss in the water when washing them. They should be washed two or three times a day in tepid water, with the club-moss, which need only be used fresh every morning.

Perspiring Feet.—Persons troubled with feet that perspire or smell offensively, may perhaps effect a cure by bathing them every night or oftener in a strong solution of borax. Two or three weeks of this treatment will probably be found sufficient.

Pewter—to make.—Melt in a crucible seven pounds of tin, and when fused throw in one pound of lead, six ounces of copper, and two ounces of zinc.

Pewter—to clean.—Ingredients: One pound of neat's-foot oil, one ounce of water of ammonia, powdered rotten-stone. Put the oil and ammonia into a basin, and stir into them as much rotten-stone as will make a thick paste. This paste may be kept in a jar for use. Wash the pewter vessel in soap and water, dry it, rub well with the paste, and polish with a soft leather.

Phial Light—to make.—Dry phosphorus, one part; olive oil, six parts. Put them into a phial, cork it, and place it in warm water for two or three hours. For use, pull out the cork, and sufficient light will be emitted to enable you to see the time by a watch. One bottle will last for years if well corked as soon as used. Ether may be employed instead of olive oil.

Phosphorus—dangers of.—A series of investigations has led to the following general conclusions:

1. The manufacture of matches from white phosphorus, owing to the unavoidable evolution of phosphorus vapors, is fraught with the greatest danger to the health and lives of the women.

2. The vapors of the phosphorus, if breathed for a long time, produce general ill-health, under circumstances not yet fully understood, but which are probably to be sought for in the idiosyncrasies of the individual. Usually it takes the local form of necrosis of the maxillary or jaw-bone.

3. The necrosis of the jaw, if not relieved in time by an operation, results in death.

4. The injurious constituents of the phosphorus vapors are neither phosphorus acid nor phosphoric acid, but phosphorus itself, free and uncombined, which passes into the blood as such, and probably circulates in the blood in the form of vapor, and from the blood acts upon special organs (liver, kidneys, heart, stomach and muscles) as well as on the bone tissues.

5. The most dangerous operations in making matches are making up the paste, dipping the splints, drying and packing the matches.

6. The manufacture of matches should only be permitted under the condition that the phosphorus vapors shall be completely excluded from the work-rooms.

7. These conditions can be sufficiently complied with by energetic ventilation, and the use of a safety apparatus.

Physic-Ball—for horses.—Barbadoes aloes, from four to five or six drams (according to size and strength of the horse); tartarate of potassa, one dram; ginger and castile soap, each two drams; oil of anise, or peppermint, twenty drops; pulverize and make all into one ball, with thick gum solution. Feed by giving scalded bran instead of oats, for two days before giving the physic, and during its operation.

Physic—for cattle.—Take half only of the dose above for a horse, and add it to glauber-salts, eight ounces; dissolve all in gruel, one quart, and give as a drench.

Piano Hammers—to re-cover.—Get felt of graduated thickness, cut it in strips the exact width, touch only the two ends with glue—not the part striking the strings. Hold in place with springs of narrow hoop iron.

Pickles (Apple)—to make.—Apple pickles are delicious. Pare and halve the apples, removing the cores carefully, to keep them in good shape. Steam till soft. Put spiced vinegar over them.

Pickles (Sweet Cucumber).—Take ripe cucumbers, cut out the inside, pare, and slice in squares an inch or two long and one wide, as you fancy. Take seven pounds of this, boil in salt water until tender, then drain. In a porcelain kettle put one quart of vinegar, three pounds of sugar, one ounce cassia buds, one of cloves, one-half allspice. Boil together, then add the cucumber, and simmer all two hours.

Pickles (Cucumber, etc.)—to make.—The pickles or small cucumbers should be carefully assorted as they come from the field, and large ones salted by themselves or thrown away. The large ones need more salt, are harder to keep and prepare for sale, and sell for much less. A cucumber that begins to grow yellow, or is too large to count one hundred to the bushel, should not be salted at all. The medium-sized ones, counting about three hundred to the bushel, and fine ones, counting about seven hundred to the bushel, are the sizes most wanted. As soon as assorted, they should be placed in empty beef barrels or molasses hogsheads and covered with brine; the

brine is made strong enough to float a potato, and the pickles are kept under by a head fitting the barrel loosely, and loaded with one or two stones of about twenty pounds weight each for a hogshead. The brine soon becomes weak by absorbing the fresh juice of the pickles, and will need to be drawn off and poured on again in order to thoroughly mix the stronger brine at the bottom of the package with the portion at the top, which is weaker. This should be repeated two or three times at intervals of two or three days, and if the brine is on large pickles, a few handfuls of salt added each time. If carefully kept under the brine and the surface of the brine kept equally mixed with what is below, there will be no trouble in keeping them.

They are taken out of the brine several days before wanted for sale, and placed in fresh, cold water, which must be changed as often as convenient—say two or three times a day—and after four or five days they will be fresh enough to receive the vinegar. The strongest of white wine (whisky) vinegar is used, and allspice and pepper added to taste. There is no need of scalding either the pickles or vinegar; if the latter is strong enough they will keep. Cider vinegar is of uncertain strength, and is often too weak to keep pickles after warm weather begins. If the vinegar is not strong enough, scalding will do no good. Pickles thus prepared are known as English pickles, and have a dull yellowish-brown color imparted by the brine. The bright green color often seen in the pickles in market is imparted by scalding them, when taken out of the brine, in a copper kettle; they absorb enough verdigris from the kettle to give them the desired color, and it is one of the signs of increasing knowledge of what is done in preparing our food, and of care in rejecting anything suspicious, that the green pickle, so universally used a few years since, is fast becoming unpopular, and giving place to the English pickle, prepared without copper. Peppers, beans, cauliflowers, unripe melons, and martynias are prepared in the same way as cucumbers.

Pickles—fine cucumber.—Make a brine that will bear an egg, and drop in the cucumbers; cover them with grape leaves; weight them down, and let them stand ten or more days. Then take them out, drain well, and soak a day or two in plenty of clear water, frequently changed. Afterward put them in a kettle with grape and cabbage leaves and a lump of alum. Cover with weak vinegar, and let them stand until they turn green. Then take out, drain, and put into stone jars. For each three gallons of pickles use one gallon of cider vinegar, and place into it one ounce each of mace and celery seed, two ounces of ginger, three ounces each of cloves and stick cinnamon, four ounces each of mustard seed (black and white mixed), choice black pepper and allspice, two tablespoonfuls of ground mustard, a handful of chopped horseradish, two pods of red pepper, four onions, and two pounds of sugar. Boil, and pour it hot over the pickles. More sugar can be added to suit the taste. Cover the jar very closely, and expose to the sun every day during hot weather.

Pickles in Jars.—Take gherkins or young cucumbers the size of your forefinger, puncture them with a needle, and put over them dry salt. In two days throw this off, add as much more, let this stay two days, and pour off. Drain them on a cloth, put them in jars and pour over them boiling vinegar, in which ginger, black pepper, sliced horseradish, mace, cloves and allspice, with shalots and garlic, have been infused. In two days drain off the vinegar, boil, and pour it on the cucumbers. Repeat the process three or four times, and they will become perfectly green and plump.

Pickle (French.)—One peck green tomatoes sliced, six large onions sliced; mix these and throw over them one teaspoonful of salt, and let them stand over night; next day drain thoroughly and boil in one quart of vinegar mixed with two quarts of water for fifteen or twenty minutes. Then take four quarts vinegar, two pounds brown sugar, one-half pound white mustard seed, two tablespoons ground allspice, and the same of cinnamon, cloves, ginger and ground mustard; throw all together and boil fifteen minutes.

Pickles—to color green.—Place a layer of cabbage leaves, the outside leaves are best, in a pan; put in the pickles, and upon these another layer of leaves, and cover the whole with cold water. Place the pan upon the stove, and let the water come almost to the boiling point; actual boiling would soften the pickles. After a while the green color will have left the cabbage leaves, and will be found to have entered the pickles. Allow the pickles to become quite cold, then bottle with the best cider vinegar, adding to each quart a tablespoonful of sugar. If desired to be especially firm and crisp, add a piece of alum as large as a nutmeg to each quart.

Pickles—to prevent molding.—Cut horseradish roots in thin slices, lengthwise and lay half a dozen or so of these pieces on the top of each crock of pickles, allowing them to remain until all the pickles are used. Grated horseradish will not do, as it soon loses its strength and then ferments.

Pickles (Sweet)—to make.—These are made from peaches, pears, plums, apples and other fruits, ripe but not too mellow; over-ripe cucumbers, watermelon rind, and other fruits are also used. The article to be pickled is first cooked in water until a straw will pass through it. The vinegar is prepared thus: To each quart of vinegar add brown sugar, three pounds; stick cinnamon, four ounces; cloves, two ounces. Bruise the spices, tie in a muslin bag and boil with the vinegar and sugar for five minutes. Pour the liquid over the fruit or other material placed in a jar. For three days in succession, heat the liquid to the boiling point, with the bag of spices, and pour over the fruit.

Pickled Plums.—Twelve pounds of plums, six of sugar, one quart of vinegar, one ounce of mace, one of allspice, half an ounce of cloves (whole), boil fifteen minutes.

Picture Frames—composition ornaments for.—Mix as much whiting as you think will be required for present use with thinnish

glue to the consistency of putty; and having a mold ready, rub it well all over with sweet oil, and press your composition in it; take it out and you will have a good impression, which you may set by to dry; or, if wanted, you may, before it gets hard, apply it to your work with thick glue, and bend it to the form required.

Pictures—to transfer from paper to wood for re-engraving.—Soak the print in a saturated solution of alcohol and white caustic potash to soften the ink, then transfer to the block under roller pressure.

Pies (Beefsteak)—to make.—Ingredients: Three pounds of rump-steak; season to taste of salt, cayenne and black pepper; crust, water, the yolk of an egg.

Have the steaks cut from a rump that has hung a few days, that they may be tender, and be particular that every portion is perfectly sweet. Cut the steaks into pieces about three inches long and two wide, allowing a small piece of fat to each piece of lean, and arrange the meat in layers in a pie-dish. Between each layer sprinkle a seasoning of salt, pepper, and, when liked, a few grains of cayenne. Fill the dish sufficiently with meat to support the crust, and to give it a nice raised appearance when baked, and not to look flat and hollow. Pour in sufficient water to half fill the dish, and border it over with paste; brush it over with a little water and put on the cover; slightly press down the edges with the thumb and trim off close to the dish. Ornament the pie with leaves, or pieces of paste cut in any shape that fancy may direct; brush it over with the beaten yolk of an egg; make a hole in the top of the crust and bake in a hot oven for about one and one-half hours. Sufficient for six or eight persons.

NOTE.—Beefsteak pies may be flavored in various ways, with oysters and their liquor, mushrooms, minced onions, etc. For family pies, suet may be used instead of butter or lard for the crust, and clarified beef-dripping answers very well where economy is an object. Pieces of underdone roast or boiled meat may in pies be used very advantageously; but always remove the bone from pie-meat, unless it be chicken or game. We have directed that the meat shall be cut smaller than is usually the case: for, on trial, we have found it much more tender, more easily helped, and with more gravy than when put into the dish in one or two large steaks.

Pie-crust.—This is made exactly as dough for crackers; it may be rolled a very little thinner. It bakes quickly, so that care must be taken not to scorch it in cooking the contents of the pie. It is not suited for an upper crust, but does admirably for pies that require but one crust. It is just the thing for those who do not think shortened pie-crusts wholesome, and it is good enough for any one. One can eat it with as much impunity as so much oatmeal mush and fruit sauce.

Pie-crust.—After having made an ordinary crust (one and one-half tablespoonfuls of shortening for each cup of flour, moistening

with water very sparingly), use it for the under crust; then roll out the upper crust in same way, adding a thin layer of lard next, sifting a thin layer of flour, patting down with flat of hand and fingers, and it is ready to place upon the pie (which we will suppose to have been filled in the meantime). Finally turn cold water over the top and consign to the oven. When baked, it will be very flaky and all one could wish for.

Pie (Chocolate).—Nothing is more agreeable for the dessert of an elaborate dinner than chocolate pie. It is so rich that a small piece only can be eaten, a fact which some cooks may think a recommendation. Take four tablespoonfuls of grated chocolate, one pint of boiling water; let it simmer for a few minutes, then take the yolks of two eggs, two tablespoonfuls of cornstarch, six tablespoonfuls of sugar. Stir this mixture together and boil until thick, like boiled custard (and, by the way, cook it in the same way by setting the dish in boiling water, and so avoid all danger of burning). Make a crust as for lemon pie, bake it, and then put in the cooked chocolate. Beat the whites of two eggs to a stiff froth, beating in a tablespoonful of pulverized sugar; put them on the top of the pie and set it in the oven to brown. Serve cold. It is not at all difficult to make, and ought to be a perfect success. It takes longer to prepare than some other dishes, and it is wise to make it in the early morning, and not run the risk of spoiling it by being obliged to hurry.

Pie (Cranberry).—For the pastry take one quart of flour, half a pound of lard, half a pound of butter, one teacup of cold water. Wash and pick over the berries, put into a saucepan with a little water, and simmer until they become soft. Bake with a cross-bar of pastry over the top.

Pie (Custard).—Boil a quart of milk with half a dozen peach leaves; when they have flavored the milk strain it and set it to boil again; blend a tablespoonful of flour smoothly with two spoonfuls of cold milk; add to boiling milk, stiring constantly; take from fire and when cool put in three well-beaten eggs, sweeten to taste, turn in pie-pans, and bake in quick oven.

Pie (Green Tomatoe).—Can't be distinguished from mince pie. Cut your tomatoes fine. One cup sugar, butter, size of an egg, two tablespoonfuls of vinegar, sprinkle with allspice, dredge over with a little flour upper and under crust. Canned tomatoes are used.

Pie (Hasty Lemon).—Make and bake an undercrust. Meanwhile, put in a nice stewpan juice and little grated peel of one lemon, one cup of sugar, one teaspoonful of cornstarch, yolks of two eggs, and a small piece of butter. Stir this till it boils, then pour into the crust. Beat whites of eggs to a foam, sweeten and flavor a little; pour it over the pie, and brown slightly in the oven.

Pie (Orange).—Three eggs, three-fourths cup of white sugar, two tablespoonfuls of butter, one orange—juice and half the grated peel—and nutmeg to taste. Cream the butter and sugar, beating in the orange and lemon until very light. Add the beaten yolks, fill two

pastry shells, and bake. Beat the whites stiff with two tablespoonfuls of powdered sugar, and when the pies are done, spread over them, returning to the oven for three or four minutes.

Pie (Oyster).—Make a paste as for pie crust, line a shallow pan with it, put in a layer of oysters, flavor with salt and bits of butter, add a layer of bread or cracker crumbs, another layer of oysters, etc., add the liquor, cover with a crust, and bake.

Pie-plates—how to care for.—Pie-plates that have been used much for baking are apt to impart an unpleasant taste to the pies, which is owing to the lard and butter of the crust soaking into them and becoming rancid. It may be removed by putting them into a brass kettle, with ashes and cold water, and boiling them in it an hour.

Pies—that stew over.—Every housekeeper knows the trouble that comes from the overflow of the contents of pies in baking. Not only is the exterior of the pie soiled, but the juice that falls upon the hot floor of the oven is burned, and gives the pie-crust an unpleasant, smoky flavor. This trouble may be completely prevented by taking a strip of cotton cloth, all the better if somewhat worn, about an inch and a half wide, and long enough to go around the pie. This strip being wet, is put around the edge of the pie, half of its width to lap upon the crust, and the other half upon the plate. This is done before the pie goes into the oven, and the strip may be removed when it is taken out, or left on until the pie goes to the table.

Pigs' Feet (Fried).—Make a batter, dip the feet into it. Fry in hot fat until brown. Make a little drawn butter, then add a spoonful of vinegar to serve with them.

Pigs—paralysis in.—Pigs are frequently subject to a partial paralysis of the nerves of the lumbar region, by which motion of the hind quarters is rendered difficult or impossible. It sometimes results from inflammation of the covering membrane of the spinal cord, caused by exposure to cold. The remedy is to rub turpentine or mustard paste upon the loins, and to give a teaspoonful of saltpeter in the food once a day. Dry pens and protection from rains in the hot season are the best preventives.

Pig (Roast).—Three or four weeks is the right age to roast whole. Cut off the toes, leaving the skin long to wrap around the ends of the legs, and put it in cold water. Make a stuffing of five or six powdered crackers, one tablespoonful of sage, two of summer savory, one chopped onion, one-half pint of cream, two eggs, pepper and salt. Mix these together, and stew about fifteen minutes. Take the pig from the water, fill it with stuffing, and sew it up. Boil the liver and heart with five peppercorns, and chop fine for the gravy. Put the pig to roast with a pint of water and a tablespoonful of salt. When it begins to roast, flour it well and baste it with the drippings. Bake three hours.

Piles—cure for.—The ingredients are: Two tablespoonfuls of tar, eight tablespoonfuls of lard, not heaped. First wash the parts affected

with castile soap and water, and then apply the ointment. The ointment should be used once or twice each day.

Pills—Abernethy's.—Each pill contains two grains of blue pill and three grains compound extract of colocynth.

Pills—Brandeth's.—Take two pounds of aloes, one pound of gamboge, four ounces of extract of colocynth, one-half pound of castile soap, three fluid drams of oil of peppermint, and one fluid dram of cinnamon. Mix, and form into pills.

Pills—Dropsy.—Jalap, fifty grains; gamboge, thirty grains; podophyllin, twenty grains; elatarium, twelve grains; aloes, thirty grains; cayenne, thirty-five grains; castile soap, shaved and pulverized, twenty grains; croton oil, ninety drops; powder all finely, and mix thoroughly; then form into pill mass, by using a thick mucilage made of equal parts of gum arabic and gum tragacanth, and divide in three-grain pills. Dose, one pill every three days for the first week; then every three or four days, until the water is evacuated by the combined aid of the pill with the alum syrup. This is a powerful medicine, and will well accomplish its work.

Pills—to sugar coat.—Pills to be sugar coated must be very dry, otherwise they will shrink away from the coating, and leave it a shell easily crushed off. When they are dry, you will take starch, gum arabic, and white sugar, equal parts, rubbing them very fine in a marble mortar, and if damp, they must be dried before rubbing together; then put the powder into a suitable pan, or box, for shaking; now put a few pills into a small tin box having a cover, and pour on them just a little simple syrup, shaking well to moisten the surface only; then throw into the box of powder, and keep in motion until completely coated, dry and smooth. If you are not very careful, you will get too much syrup upon the pills; if you do, put in more, and be quick about it to prevent moistening the pill too much, getting them into the powder as soon as possible.

Pine (Stained)—to imitate black walnut.—The *Lumberman* recommends the following manner of staining pine to represent black walnut: Put pulverized asphaltum into a bowl with about twice its bulk of turpentine and set where it is warm, shaking from time to time until dissolved; then strain and apply with either a cloth or a stiff brush. Try a little first, and if the stain be too dark, thin it with turpentine. When the wood is thoroughly dry, polish with a mixture of two parts shellac varnish and one part boiled oil. Apply by putting a few drops at a time on a cloth and rubbing briskly over the wood.

Pine (Stained)—to imitate mahogany.—Pinework brushed two or three times with a strong boiling decoction of logwood chips, and varnished with a solution of shellac in alcohol, appears almost like mahogany, both in color and hardness. After washing with decoction of logwood and drying thoroughly, it should receive two coats of varnish. Then carefully sandpaper and polish, and give a final coat of shellac varnish.

Pine Floors—imitation of oak—An oaken color can be given to

new pine floors and tables by washing them in a solution of copperas dissolved in strong lye, a pound of the former to a gallon of the latter. When dry, this should be oiled, and it will look well for a year or two; then renew the oiling.

Pin Cushion Filling.—Coffee grounds make a highly successful filling for a pin cushion. They must be dried perfectly before using. Put them in a bag and hang behind the kitchen stove till you have enough that are dry to fill the cushion. They do not gather moisture, and consequently do not rust the needle.

Pip—to cure.—This is a troublesome and somewhat fatal complaint to which all domestic poultry are liable; it is also a very common one. Some writers say it is the result of cold; others, that it is promoted by the use of bad water. But, whatever the cause, the disease is easily detected. There is a thickening of the membrane of the tongue, particularly at the tip; also a difficulty in breathing; the beak is frequently held open, the tongue dry, the feathers of the head ruffled, and the bird falls off its food; and if neglected, dies. The mode of cure which, if put in practice in time, is generally successful, is to remove the thickened membrane from the tongue with the nails of the forefinger and thumb. The process is not difficult, for the membrane is not adhesive. Then take a lump of butter, mix into it some strong Scotch snuff, and put two or three large pills of this down the fowl's throat. Keep it from cold and damp, and it will soon recover. It may, perhaps, be necessary to repeat the snuff balls. Some writers recommend a mixture of butter, pepper, garlic, and scraped horseradish; but we believe the Scotch snuff to be the safest, as it is the most simple.

Pitting from Small-pox, etc.—to prevent.—The following treatment has been found very successful in preventing those fearful marks which small-pox and other like diseases so often leave behind: With a camel's-hair brush apply to each spot or pustule on all exposed surfaces of the face and person a little acetum cantharidis, or any vesicating fluid. As soon as blistering is evident by the whitening of the skin in the parts subjected to the application, the fluid producing it must be washed off with warm water or very thin arrow-root. The pain of this application is very slight and very transient; the benefit of it immense and permanent.

Planing Perpendicularly.—In planing perpendicularly, it is necessary to swivel the bottom of the small head around, so it will stand about three-fourths of an inch inside of square, toward the piece you are to plane. This prevents breaking the tool when the bed runs back.

Plants (House)—fertilizer for.—When plants are in a growing state they may be stimulated by the use of guano water. A small teacupful of Peruvian guano dissolved in a pailful of rain water is strong enough; water the soil with this once, or at most twice a week. The water of ammonia (hartshorn) is about as good, and can

be had everywhere. If of ordinary strength add a fourth of an ounce (two teaspoonfuls) to a gallon of water, and use as above stated

Plants—hast for.—A lady who has been very successful with plants makes two suggestion as to their management. Every gardener and florist knows the value of what is called bottom heat.' A warm atmosphere—especially if a dry one—is often sufficient to bring about healthy growth, and is sometimes injurious. What is wanted for many kind of plants and flowers, is moist heat at the roots and fibers, where growth early starts, and from whence the stimulus is conveyed to every other part of the plant. A thrifty growth below the ground is sure to be followed by fruit and flowers above."

She accomplished this by filling the saucers of her flower pots with hot water. This was, of course, absorbed and carried up to the roots and fibers, giving the required bottom heat. Unthrifty plants, in addition to this, she placed on the mantelpiece over the kitchen range: keeping them, of course, well watered. It supplied heat where it is most wanted—at the roots—and the benefit was marked In warm rooms the temperature is at the top, and the coldest near the floor where the pots are This reverses the proper order giving the roots of a plant the coldest place.

Another important matter in house plants is to give them the morning sun. Windows where flowers are kept should, therefore face the east. The reasons are not known, perhaps, but the fact is patent to all those whose business it is to develop healthy growth in plants and flowers, that an hour of morning sun is worth three hours of afternoon sun.

Plant Lice—kerosene for.—A correspondent, after using carbolic acid for the scale bug on orange trees, camelias, etc., which proved too strong in solution, destroying both plants and insects, employed pure kerosene through an atomizer spraying it over camelias. The leaves were covered with the scale and black fungus. A very small quantity was enough to cover the whole plant. After the fluid had evaporated the scales were found dead, shriveled and detached; the black fungus was dried to a loose powder The same remedy was tried on pelargoniums, and the flower-buds of green-house roses, but these were too delicate, and the new and tender growth, as well as the insects, were destroyed.

Plants—to prepare for winter.—It is a great mistake to delay the work of preparation for winter until it is suggested by cool nights or a warning given by blighting frosts. When a plant has been taken from a pot and planted in open ground it usually outgrows its former place, and is too large for any vessel of convenient size. The root should be cut away to a considerable extent and likewise the top or foliage must be correspondingly reduced Novices often fail at this point, for they dislike to part with any of the new growth, and set the plant in a pot unpruned and expect what is not possible, that it will flourish. Cut back root system and branch system equally is the

rule. Plants when thus transplanted need to be favored by being kept in the shade and sheltered from the drying winds until they have made a good start in the pots. Many of the house plants are kept in their pots during the summer and will need repotting, or the pot washed and the surface soil replaced by fresh, rich earth A larger pot is needed by those plants whose roots have formed a mat along the inner surface. The ball of earth can be examined quickly by spreading the left hand on the vessel—the stem passing between the fingers, and with the other hand on the bottom invert the pot and give the edge a downward tap against some object If this does not succeed, pour some water around the edge, and after a short time repeat the operation. All old pots should be clean and if the new ones are used soak them in water until the pores are filled. A piece of broken vessel is placed over the bottom hole before filling in the potting earth. All the necessary pots soil. etc., should be abandoned now, that they may be at hand when needed at any time during the winter.

Plants—to repot.—Shake the old earth from the plants after they commence to grow in spring then pot them into smaller pots than those just occupied, as the plants make fresh growth and fill these pots with roots, repot into those of a size larger, and so on until the plants are in their flowering pots. By adopting this plan the plants are supplied with fresh soil from time to time, and not kept growing on from year to year in the same soil, which soon becomes exhausted. The above remarks apply more particularly to such plants as fuchsias, pelargoniums, etc.

Plants—specimens for preservation.—The plants you wish to preserve should be gathered when the weather is dry and after placing the ends in water, let them remain in a cool place till the next day. When about to be submitted to the process of drying place each plant between several sheets of blotting-paper, and iron it with a large smooth heater, pretty strongly warmed, till all the moisture is dissipated. Colors may thus be fixed, which otherwise become pale, or nearly white. Some plants require more moderate heat than others, and herein consists the nicety of the experiment; but I have generally found, that if the iron be not too hot, and is passed rapidly, yet carefully, over the surface of the blotting-paper, it answers the purpose equally well with plants of almost every variety of hue and thickness. In compound flowers, with those also of a stubborn and solid form, as the centaurea, some little art is required in cutting away the under part, by which means the profile and forms of the flowers will be more distinctly exhibited. This is especially necessary, when the method employed by Major Velley is adopted, viz., to fix the flowers and fructification down with gum upon the paper previous to ironing, by which means they become almost incorporated with the surface. When this very delicate process is attempted, blotting-paper should be laid under every part excepting the blossoms, in

order to prevent staining the white paper. Great care must be taken to keep preserved specimens in a dry place.

Plants—to start early.—A writer on gardening gives the following hints on starting tender seeds, such as tomatoes, squashes melons and the like: "It is desirable in transplanting not to check the growth by disturbing the roots. A good way to avoid this is to scrape out turnips, fill them with good soil and plant in two or three seeds setting them in a warm, light place, and keeping them moist. When the weather is suitable, place these out in the garden at the proper depth The turnip will decay and the plant will thrive unchecked if properly cared for. Do not use potatoes instead of turnips Another method is to get squares of sod, say six inches wide, from good, mellow soil, turn them bottom up and put such seeds as squash, melon or sweet corn, and treat them in the same way, not putting out till the weather is quite warm, and then protecting against bugs. For more delicate plants, flowers, etc., make little square paper boxes out of thin writing paper, or thick newspaper, merely folding them at the corners as you would the paper in covering a book, and tacking them with a needle and thread: make them about three inches square and two deep Fill with good soil; start the seeds and put them out at the proper time, boxes and all, without disturbing the roots. If you fear the paper is too strong for the roots to penetrate cut carefully on the bottom of the box the shape of a cross, and all will be well."

Plants—for the window.—The necessity of a gradual change must be emphasized in removing plants from the open air to the dwelling rooms. It is best to place the plants in a room where there is no fire, and one that can be opened during the day. After a while the plants may be taken to the close living-room, in which there is a fire.

Plants—winter care of.—Plants in the winter require very much less water than in summer. Never water unless the surface of the soil is dry. There are exceptions to this in the case of caflas and such plants as require a great deal of water, but this is a good rule for most plants. A great many persons persist in watering plants every day whether it is needed or not. In this way the soil becomes sour and heavy, and the plant diseased. Always use water moderately warm.

Plaster (Adhesive)—useful as strapping for cuts, etc.—Ingredients. Three-fourth pound of diachylon, and one-half ounce of pounded yellow resin. Put these into a jar, and melt them by the side of the fire, stirring them continually. When properly melted, and nearly cold, spread the plaster thinly on linen or thin leather. The plaster must be warmed before it is used.

Plasters (Carbolic).—Carbolic glycerine, thirty-four parts by weight; prepared chalk, ninety-four parts. Mix well by kneading, and inclose in closely-stoppered jars.

Plasters (Irritating).—Boil together one pound tar, half an ounce burgundy pitch, one ounce white pine turpentine, and two ounces

resin. Finely powder one ounce each mandrake root, blood root, poke root, and Indian turnip. Stir these into the melted tar, etc., before it cools. This plaster, spread on muslin and renewed daily, will raise a sore, which is to be wiped with a dry cloth, to remove matter, etc. The sore must not be wetted. This a powerful counter-irritant for removing internal pains, and in other cases where an irritating plaster is necessary.

Plasters (Mustard).—By using syrup or molasses for mustard plasters they will keep soft and flexible, and not dry up and become hard, as when mixed with water. A thin paper or fine cloth should come between the plaster and the skin. The strength of the plaster may be varied by the addition of more or less flour.

Plaster of Paris Cast from a Person's Face.—The person must lie on his back, and his hair be tied behind; into each nostril put a conical piece of paper, open at each end, to allow of breathing. The face is to be lightly oiled over, and the plaster being properly prepared, is to be poured over the face, taking particular care that the eyes are shut, till it is a quarter of an inch thick. In a few minutes the plaster may be removed. In this a mold is to be formed, from which a second cast is to be taken, that will furnish casts exactly like the original.

Plastered Walls—home repairs of.—Small holes in white plastered walls can be easily repaired without sending for the mason. Equal parts of plaster of Paris and white sand—such as is used in most families for scouring purposes—mixed with water to a paste, applied immediately and smoothed with a knife or flat piece of wood, will make the broken place as good as new. The mixture hardens very quickly, so it is best to prepare but a small quantity at a time.

Plaster of Paris—substitute for.—Best whiting, two pounds; glue, one pound; linseed oil, one pound. Heat all together, and stir thoroughly. Let the compound cool, and then lay it on a stone covered with powdered whiting, and heat it well till it becomes of a tough and firm consistence; then put it by for use, covering with wet cloths to keep it fresh. When wanted for use, it must be cut in pieces adapted to the size of the mold, into which it is forced by a screw press. The ornament may be fixed to the wall, picture-frame, etc., with glue or white lead. It becomes in time as hard as stone itself.

Plates—to clean.—Hartshorn is one of the best possible ingredients for plate-powder in daily use. It leaves on the silver a deep, polish, and is less hurtful than any other article. To wash plate carefully, first to remove all the grease from it, and this can be done with the use of warm water and soap. The water should be as nearly hot as the hand can bear it. Then mix as much hartshorn powder as will be required into a thick paste with cold water. Smear this lightly over the plate with a piece of soft rag, and leave it for some little time to dry. When perfectly dry, brush it off quite clean with a soft plate-brush, and polish the plate with a dry leather. If

the plate be very dirty or much tarnished, spirits of wine will be found to answer better than the water for mixing the paste.

Placques of Wood.—Most of the pretty placques of wood so much used to paint on have no rings on the back, and consequently cannot be hung on the wall. To remedy this get a curtain ring; through this put a loop or ribbon or thin cloth, and glue this loop to the back of the placque. Be sure to have it exactly in the center, and do not try to hang it up until it is perfectly dry.

Plumes (Ostrich)—to clean.—White ones can be cleaned by taking four ounces of white soap, cut it into small pieces, dissolve in four pints of water, rather hot, and make a lather; into this dip the feathers, and wash gently with the hands for about ten minutes; rinse in hot water and shake until dry. Ostrich tips can be curled by holding them in the steam from water until they are damp, and then drawing each fiber separately over the blade of a blunt knife.

Plumes—to curl.—To curl plumes, put some coals of fire on a shovel, sprinkle brown sugar on the coals, and hold the plumes in the smoke. One application will be sufficient to make them as nice as new. Another way: Take a little salt and sprinkle it upon the hot stove, and hold the plume over the smoke a few minutes.

Plums (Spiced).—Spiced plums are a good substitute for currant jelly to eat with meat. Cook them in a little water, remove the stones, spice to suit the taste, and boil until thick.

Poisons.—1. As a general rule, give emetics after poisons that cause sleeplessness and raving; chalk, milk, butter, and warm water, or oil, after poisons that cause vomitings and pain in the stomach and bowels, with purging; and when there is no inflammation about the throat, tickle it with a feather to excite vomiting. Always send immediately for a medical man.

2. When a poison has been swallowed, send immediately for a physician, and in the meantime give a tablespoonful of ground mustard in a tumblerful of warm water, until vomiting occurs; if there is no mustard, common salt will answer. If an alkali like washing soda is taken, give vinegar and water, and follow in a short time with an emetic.

Poison (Adder's)—treatment.—Apply spirits of ammonia on lint to the part, and give the patient frequently small doses of ammonia and warm water, till medical aid arrives.

Poisons and their Antidotes.—The following list gives some of the more common poisons and the remedies most likely to be at hand in the case of need. The directions may be old, but in case you get a good strong dose of poison down, you will not object to a cure on account of its age:

ACIDS.—These cause great heat and sensation of burning pain from the mouth down to the stomach. Remedies: Magnesia, soda, pearl-ash or soap dissolved in water; then use the stomach pump or emetic.

ALKALIES.—Best remedy is vinegar.

AMMONIA.—Remedy: lemon juice or vinegar.

ALCOHOL.—First cleanse out the stomach by an emetic, and then dash cold water on the head and give ammonia (spirits of hartshorn).

ARSENIC.—In the first place evacuate the stomach, then give the whites of eggs, lime water, or chalk and water, charcoal and the preparations of iron, particularly hydrate.

LEAD.—White lead or sugar of lead. Remedies: alum, cathartic, such as castor-oil and epsom salts especially.

CHARCOAL.—In poisons by carbonic acid gas, remove the patient to open air, dash cold water on the head and body, and stimulate nostrils and lungs by hartshorn, at the same time rubbing the chest briskly.

CORROSIVE SUBLIMATE.—Give whites of eggs, freshly mixed with water, or give wheat flour and water, or soap and water freely.

CREOSOTE.—Whites of eggs and the emetics.

BELLADONNA.—Give emetics, and then plenty of water and vinegar, or lemonade.

MUSHROOMS, WHEN POISONOUS.—Give emetics, and then plenty of vinegar and water, with doses of ether, if handy.

NITRATE OF SILVER (LUNAR CAUSTIC).—Give a strong solution of common salt and emetics.

TARTAR EMETIC.—Give large doses of tea made of galls, peruvian bark or white oak bark.

VIRDIGRIS.—Plenty of whites of eggs and water.

WHITE VITRIOL.—Give the patient plenty of milk and water.

OPIUM.—First give a strong emetic of mustard and water, then strong coffee and acid drinks; dash cold water on the head.

NUX VOMICA.—First emetics, then brandy.

OXALIC ACID (frequently taken for epsom salts).—Remedies: chalk, magnesia, or soap and water, and other soothing drinks.

PRUSSIC ACID.—When there is time, administer chlorine in the shape of soda or lime. Hot brandy and water, hartshorn and turpentine are also useful.

Poisons—best antidote for.—If a person swallow any poison whatever, or has fallen into convulsions from having overloaded the stomach, an instantaneous remedy, more efficient and applicable in a larger number of cases than any half a dozen medicines we can now think of is a heaping teaspoonful of common salt and as much ground mustard stirred rapidly in a teacup of water, warm or cold, and swallowed instantly. It is scarcely down before it begins to come up, bringing with it the remaining contents of the stomach; and lest there be any remnant of the poison, however small, let the white of an egg, or a teacup of strong coffee, be swallowed as soon as the stomach is quiet. These very common articles nullify a larger number of virulent poisons than any medicines in the shops.

Poison by Ivy and Vines—remedies for.—1. Dissolve sugar of lead—a bit the size of a hazlenut—in half a teacup of sweet or milk

warm water. Apply as warm as can be easily borne with a soft, linty piece of linen rag. Three or four applications are sufficient to effect a cure. If the poison is on the face and nearing the eyes or mouth, this astringent wash may be constantly applied.

2. Poison occasioned by the running ivy may be cured by first bathing the afflicted part thoroughly with a strong solution of salt and water, and then anointing two or three times a day with sweet oil, till a cure is effected. In cases of ivy poisoning, bathe the parts in sweet spirits niter.

3. The *Medical Record* suggests the use in all cases of poisoning by this plant of Labarraque's solution of chloride of soda. The acid poison requires an alkaline antidote, and this solution meets the indication fully. When the skin is unbroken it may be used clear three or four times a day; or in other cases diluted with from three to six parts of water. After giving this remedy a trial, no one will be disposed to try anything else. It is one of the most valuable external agents known to the profession, and yet seldom appreciated and but rarely employed. It will sustain its reputation as a local application in erysipelas, burns and scalds.

4. The poison ivy is so very abundant that were all equally susceptible to its influence, we should hear much more of its effects than we do at present. With many, the poison produces only a slight eruption on the skin and an intense itching. Others are more seriously affected, and the face swells up to such an extent that the features are hardly visible. Nearly every locality has its popular remedies for the poison, and new ones are frequently proposed. As a general thing, most cases are relieved by keeping the bowels open by the use of salts, and washing the eruptions with a strong solution of sugar of lead. The latest remedy, which is now going the rounds, is to bathe the affected parts with lime water, applied as hot as it can be borne. This is simple, the remedy is usually at hand, and is worth trying, as other alkaline washes have been found useful. No harm can result.

Poison Ivy—how to detect.—The poison ivy and the innocuous kind differ in one particular, which is too easy of remembrance to be overlooked by any one who is interested enough in the brilliant hued leaves in autumn to care for gathering them; the leaves of the former grow in clusters of threes, and those of the latter in fives. As somebody has suggested in a juvenile story book, every child should be taught to associate the five leaves to the cluster with the fingers on the human hand, and given to understand that when these numbers agree they can be brought into contact with perfect safety.

Poker—to harden.—The fire poker, by constant use, becomes soft, and is generally more or less bent. This arises from its being left in the fire and becoming hot, then being put on the fender where it slowly cools, an operation which softens the best steel. When a poker has thus become soft and bent, it may be again hardened by making it hot two or three times, and plunging it every time into v

pail of cold water. The sudden cooling of steel makes it again hard.

Polish (Liquid Black Lead).—Black lead, pulverized, one pound; turpentine, one gill; water, one gill; sugar, one ounce.

Polish—for brass ornaments inlaid in wood.—If the brass-work is very dull, file it with a small, smooth file; then polish it with a piece of soft felt dipped in Tripoli powder mized with linseed oil until the desired effect is obtained.

Polish—for furnitnre.—One-third of spirits of wine, one-third of vinegar, and one-third of sweet-oil, or rather more of the last. Shake the bottle well daily for three weeks; it is then fit for use, but the longer it is kept the better it is. The furniture must be rubbed till the polish is dry. Use every two or three months, and rub the furniture over daily when dusted. For dining-room tables and sideboards, use it every week; it makes them beautifully bright.

Polish—for boots and shoes.—Mix together two pints of the best vinegar, and one pint of water; stir into a quarter of a pound of glue, broken up, half a pound of logwood chips a quarter of an ounce of isinglass. Put the mixture over the fire and let it boil ten or fifteen minutes. Then strain the liquid, and bottle and cork it. When cold it is fit for use. The polish should be applied with a clean sponge.

Polish—for furniture.—Equal proportions of turpentine, linseed oil and vinegar well rubbed in, and then polished with a piece of chamois skin, will work wonders with furniture that has become dingy from exposure to dust and old age.

Polish—for furniture.—Fill a pint bottle with equal parts of boiled linseed oil and kerosene oil; shake together well, apply with a soft piece of flannel; rubbing dry with a second piece of flannel. This will remove all scratches and white stains. Burn up the rags when through with them.

Polishing Powder for Gold and Silver.—Rock alum burned and finely powdered, five parts; levigated chalk, one part. Mix; apply with a dry brush.

Polish—for leather.—Mix intimately together three or four pounds of lamp-black and a half pound of burned bones with five pounds of glycerine and five pounds of syrup. Then gently warm two and three-quarters ounces of gutta-percha in an iron or copper kettle until it flows easily, add ten ounces of olive oil, and when completely dissolved, one ounce of stearine. This solution, while still warm is poured into the former and well mixed. Then add five ounces of gum senegal dissolved in one and a half pound of water, and a half ounce of lavender or other oils to flavor it. For use it is diluted with three or four parts of water. It gives a fine polish, is free from acid, and the glycerine keeps the leather soft and pliable.

Polish—for woods.—Mahogany, walnut, and some other woods may be polished by the use of the following mixture. Dissolve by heat so much beeswax in spirits of turpentine that the mixture, when cold, shall be of about the thickness of honey. This may be applied to furniture or to work running in the lathe by means of a piece of

clean cloth, and as much as possible should be rubbed off by using a clean flannel or other cloth.

Polish—for mahogany.—Ingredients: One-fourth pound of beeswax, one ounce of colophony, two ounces of oil of turpentine. Cut the wax into thin pieces, pound the colophony, and melt them together in a pipkin; then warm the oil of turpentine, and stir it gradually into the pipkin. When thoroughly mixed, the polish may be put into a jar and tied over till required. It should be well rubbed into the mahogany by means of a smooth piece of woolen cloth. This is an excellent polish for general furniture.

Polish (Starch).—White wax, one ounce, spermaceti, two ounces; melt them together with a gentle heat. When you have prepared a sufficient amount of starch, in the usual way, for a dozen pieces, put into it a piece of the polish about the size of a large pea, more or less, according to large or small washings. Or thick gum solution (made by pouring boiling water upon gum arabic), one teaspoonful to a pint of starch, gives clothes a beautiful gloss.

Polish—for stoves.—If stove polish is mixed with very strong soap suds; the luster appears immediately, and the dust of the polish does not fly around as it usually does.

Polishing Powder for Specula.—Precipitate a dilute solution of sulphate of iron by ammonia in excess; wash the precipitate; press it in a screw press till nearly dry; then expose it to heat until it appears of a dull red color in the dark.

Polish for Patent Leather Goods.—Take a half pound of molasses or sugar, one ounce of gum arabic, and two pounds of ivory black; boil them well together, then let the vessel stand until quite cooled, and the contents are settled; after which bottle off. This is an excellent reviver, and may be used as a blacking in the ordinary way, no brushes for polishing being required.

Polishing Tortoise Shell.—Material: Rouge powder. Rub the tortoise shell with a linen rag dipped in rouge powder; afterward polish with the hand. Tortoise-shell combs should always be rubbed with the hand after they are removed from the hair; they will not then lose their polish.

Pomatum.—Take one ounce of spermaceti, one ounce of castor oil, four ounces of olive oil, and five cents' worth of bergamot, and melt them together in a pot placed in boiling water, stirring the mixture all the while; when thoroughly mixed, pour the mixture into pots while hot.

Pop-corn—to sugar or crystalize.—Put into an iron kettle one tablespoonful of water, and one teacupful of white sugar; boil until ready to candy, then throw in three quarts of corn nicely popped; stir briskly until the candy is evenly distributed over the corn; set the kettle from the fire, and stir until it is cooled a little and you have each grain separate and crystalized with the sugar; care should be taken not to have too hot a fire lest you scorch the corn when chrystalizing. Nuts of any kind prepared this way are delicious.

Porcelain Kettle—to clean.—To clean a browned porcelain kettle, boil peeled potatoes in it. The porcelain will be rendered nearly as white as when new.

Pork Barrel—to make.—Buy a coal oil barrel; knock one head in, take a bunch of old hay, set fire to it and throw it in the barrel; let it burn until the staves commence to burn; put it out by turning the barrel upside down, scrape the coals off, and you have a good, sweet barrel.

Pork Cheese.—Take the heads and feet of fresh pork, and boil them until the meat is so tender that it can be stripped from the bones. Chop the meat and season it with salt, pepper and sage to suit your taste. Mix with your hands, and put this mixture into deep pans with straight sides; press it down closely with a plate that fits well over the meat. Place the under side of the plate next to the meat, and put a weight upon the top of the plate. When well pressed, turn the pork cheese out of the pan. This cheese is generally eaten at supper or breakfast, and after being cut into slices, is dressed with vinegar or prepared mustard.

Pork—way to put down.—Pack closely in the barrel, first rubbing salt well into all exposed ends of bones, and sprinkle well between each layer, using no brine until forty-eight hours after, and then let the brine be strong enough to bear an egg. After six weeks take out the hams and bacon and hang in the smoke-house. When warm weather brings danger of flies, smoke a week with hickory chips, avoiding heating the air much. If one has a dark, close smoke-house, as the writer has, the meat can hang in it all summer; otherwise pack in boxes, putting layers of sweet dry hay between. Long experience has convinced me that this method of packing is preferable to packing in dry salt or ashes.

Pork (Roast).—Take a leg of pork and wash it clean; cut the skin in squares; make a stuffing of grated bread, sage, onion, pepper and salt, moistened with the yolk of an egg. Put this under the skin of the knuckle, and sprinkle a little powdered sage into the rind where it is cut; rub the whole surface of the skin over with the feather dipped in sweet oil. Eight pounds will require about three hours to roast it.

Portable Bath.—Make a small circular boiler of copper or tin, and fit the same into an upright tin stand, in which, directly under the boiler, you must leave an aperture to contain a small spirit lamp. The boiler lid must fit tightly and be provided with three small tubes pointing upward. The boiler being filled with water and the lamp lighted, as soon as the steam gets up, it rushes through these tubes, and the patient, seated on a cane chair, with his or her feet in a pan of warm water, with a suitable cloak tightly fastened around the neck, is speedily enveloped in a cloud of steam. Ten minutes is the time recommended for the duration of the first few baths. It may be afterward increased, but not beyond half an hour. On getting out of the cloak, plunge into a cool bath for a few minutes, then rub the

skin till it is quite dry and glowing with a coarse towel and a pair of good hair-gloves. Persons in health or disease will experience a wonderful recuperative power in the frequent use of this bath, and all will find it incomparably superior to the use of drugs in any form whatever.

Posts (Wood)—to preserve.—Experience proves that wood which is exposed to the action of water, or put into the ground, should first be subjected to charring, and then, before it has entirely cooled, be treated with tar until the wood is impregnated in the most thorough manner. By proceeding in this manner, the acetic acid and oils contained in the tar are evaporated by the heat, and only the resin left behind, which penetrates the pores of the wood, and forms an air-tight and waterproof envelope. It is found important that the posts be impregnated somewhat above the line of exposure, as it is here that the action of decay affects the wood first.

Potatoes—to cook.—The universal principle of cooking all vegetables must not be forgotten in preparing potatoes, for the addition of salt even with the potato is most essential. The quantity, of course, varies much, but will generally be found to be of the proportion of a large tablespoonful to half a gallon of water. Most vegetables require to be plunged into boiling water; but in some cases the potato forms an exception, for old potatoes should be placed in cold water, otherwise, the outside would become pulpy or watery before the inside got soft. Middle-aged potatoes should be boiled in lukewarm water, and new follow the almost universal rule of being plunged into boiling water, in which, if liked, a little mint may have been placed. When quite new, they require only to be rubbed in a cloth, not peeled. Potatoes which cannot come under the head of new should be well washed (and, to my thinking, those boiled in their skins are preferable) and peel with a sharp knife (if a peeler, a most useful and inexpensive adjunct to the kitchen, be not handy), and place them in a stew-pan; pour the water over them with the addition of a little salt, then put the lid on, and if it does not fit quite close place a weight on the top, or the bubbling of the water will force it open and thus allow some of the steam to evaporate. Thus keep them for ten minutes, and after drain all the water off; by this means, the water having no time to soak in, the potatoes will become mealy, otherwise they often appear semi-mashed. Then place the stew-pot on the boiler at the side of the fire, with a cloth, folded into several thicknesses, over the potatoes inside of the lid. The yellow potato, though not so sightly on the dinner table as its brother the mealy, has the advantage of being a better boiler, and one which does not require so much attention, not being so readily broken. To steam (by adopting which method the potato becomes more digestible and more mealy in appearance), first wash and pare, then throw each as it is finished into cold water; drain and put into a steamer, which place on an ordinary saucepan, filled with boiling water. Be careful that your steamer fits quite tightly, or the steam escaping will not allow the

vegetable to cook; cover closely, and keep them boiling until sufficiently cooked, which can be ascertained by plunging a fork into one; if done, the potato will appear soft. Shake the steamer over a bowl a few times in order to give them a mealy look. The time depends much on both the size and the kind of potato, but varies from twenty to fifty minutes.

Potatoes—to boil.—To boil a potato well requires more attention than is usually given. They should be well washed and left standing in cold water an hour or two, to remove the black liquor with which they are impregnated, and a brackish taste they would otherwise have. They should not be pared before boiling; they lose much of the starch by so doing, and are made insipid. Put them into a kettle of clear cold water, with a little salt; cover closely, and boil rapidly, using no more water than will just cover them, as they produce a considerable quantity of fluid themselves while boiling, and too much water will make them heavy. As soon as just done instantly pour off the water, set them back on the range, and leave the cover off the saucepan till the steam has evaporated. They will then, if a good kind, be dry and mealy. This is an Irish recipe, and a good one.

Potatoes (Boiled).—One of the ways of making a breakfast dish of cold potatoes, is to slice about half an inch thick, place in a wire gridiron and broil them, browning both sides equally. As they are removed, sprinkle each slice with salt and pepper, and place on it a bit of butter, and serve hot.

Potato Balls.—Use mashed potatoes left from the dinner, or mash them for the purpose; add the yolk of an egg, and make into flattened cakes. Dip these in egg and cracker crumbs, and fry, or place upon a greased griddle and brown evenly on both sides.

Potatoes a la Creme.—Put into a saucepan three tablespoonfuls of butter, a little chopped parsley, salt and pepper to taste. Stir up well until hot, add a small teacupful of cream, thicken with two teaspoonfuls of flour, and stir until it boils. Chop some cold boiled potatoes, put into the mixture and boil up once.

Potatoes (Fried).—The first essential is to have the potatoes all sliced of an even thickness. This in large establishments is accomplished by means of an apparatus in which a board has a knife fastened in it after the manner of a sauer-kraut cutter, or dried-beef slicer, the edge of the knife placed far enough above the level of the board to give the required thickness. The peeled potatoes are put in a frame which slides back and forth over the knife, and this has a follower to keep the potatoes in place. By means of this a large quantity can be rapidly sliced, and with the greatest uniformity. The next requisite is a kettle with an abundance of very hot lard, and the next a wire cage. The sliced potatoes are placed in the cage, plumped into the lard, and at the proper instant, which can only be learned by experience, they, by means of the cage, are all withdrawn at once. A few shakes free them from all adhering fat, and if the operation is properly done the potatoes may be served on a napkin

without greasing it. All these are necessary in order to have fried potatoes in perfection.

We have had satisfactory results from carefully slicing the potatoes with a knife and letting them drop into ice-water; taking out a handful at a time, putting them into a towel, and giving it a few jerks to dry them, and then popping them into fat, from which as soon as done they were removed by a large skimmer. Then another portion was done. The use of ice-water tends greatly to preserve the crispness. Of course, great excellence in this as in many other matters is only possible where the operation is done upon a large scale, but by taking proper pains the home-made article can be greatly improved.

Potatoes (Fricasseed).—Peel the potatoes and slice very thin, as for frying, and allow them to remain in cold water for half an hour. Place in a pudding dish, adding salt, pepper, and milk; put in the oven and bake for an hour. When taken out, cut a lump of butter half as big as a hen's egg into small bits and scatter them over the top just before serving. We find that some potatoes need longer baking, two hours not being too much. The quantity of milk should be sufficient to leave a little rich gravy to moisten the potatoes; half a pint to a dish of moderate size will usually be enough, but this can be learned by experience. If this is once tried it will be very sure to be repeated.

Potatoes (Lyonnaise).—Half a pound of cold boiled potatoes; two ounces of onion; a heaping teaspoonful of chopped parsley; butter the size of an egg. Slice the cold potatoes; put the butter into a saucepan, and when hot throw in the onion (minced), and fry to a light color; add the potatoes; stir until hot and light brown; then mix the parsley, and serve hot.

Potatoes (Mashed).—Peel ten medium-sized potatoes, carefully taking out all eyes or imperfections, and throw in a crock of cold water. When you commence operations, put on the stove over a brisk fire a clean iron pot, one-third full of clean water. While yon are peeling, the water will come to a boil. As soon as it boils briskly, throw in the potatoes one by one. Cover closely, and in about fifteen minutes you can try them with a fork. If they are easily pierced, take off the pot and drain the water off, leaving potatoes in pot. Take a wooden masher and work them fine in the pot. Add a teacupful of sweet cream and half a tablespoonful of salt. Use the masher vigorously until well mixed, then add a lump of butter size of small egg. Mix again with masher. Now take a strong table-fork, and work through the mass until as light as feathers. Take up in hot dish with ladle, smooth over top, make several holes with edge of ladle or knife, and fill these with lumps of good, sweet butter; than take a pinch of black pepper from the pepper-box and dot over top. Serve immediately. Another says: The best way to mash potatoes is to beat them with a fork. Stir rapidly, and every lump will soon vanish, leaving the mass much lighter and flakier than does the common way.

Potatoes—for breakfast.—A nice way to prepare potatoes for breakfast is to cut cold boiled ones in square pieces, and dip them in beaten egg, and put them on a buttered pie-plate in the oven; when they are hot and brown send them to the table.

Potatoes (Sweet)—to bake.—Sweet potatoes baked under a roast of beef or lamb are very nice. Take the skin off carefully so as to leave the surface smooth, wash and put them under the meat, allowing half an hour for a medium-sized potato. If any are left do not throw them away, but warm them for breakfast. Slice them thin and fry brown in butter.

Potato Salad.—Slice cold boiled potatoes very thin, place in a dish, strewing among them pepper and salt, and a little onion and parsley chopped fine; add vinegar enough to slightly moisten. This is excellent with cold meats. Those who like oil will find it a great improvement to add it. Make the salad an hour or two before it is to be eaten.

Potato Beetle—remedy for.—A farmer states that he uses only coal gas tar to prevent the ravages of the potato beetle. He puts a gallon of tar in a tub, over which he pours boiling water, which is allowed to settle and cool. This is sprinkled over the vine with an ordinary sprinkler. A gallon of tar suffices for several acres of potatoes.

Potatoes—to preserve from rot.—Dust over the floor of the bin with lime, and put in about six or seven inches of potatoes, and dust with lime as before, then more potatoes, using about one bushel of lime to forty bushels of potatoes. The lime improves the flavor of the potatoes, and effectually kills the fungi which causes the rot.

An old veteran farmer, with sixty-three years' experience, has successfully fought the potato rot in the ground, as follows: He plants them in the latter part of April, or beginning of May, and in the old of the moon. When six inches high they are plastered and dressed out nicely. Now for the secret. When blossoming, take two parts plaster, and one part fine salt, mix well together, and put one large spoonful of this compound as near the center of each hill as possible. When ripe, take them out of the ground, have them dry when put in the cellar, and keep them in a dry, cool place.

Potatoes—how to get new varieties.—When the vines are done growing and are turned brown, the seed is ripe; then take the balls and string with a large needle and strong thread; hang them in a dry place, where they will gradually dry and mature, without danger or injury from frost. In the month of April, soak the ball for several hours from the pulp; when washed and dried, they are fit for sowing in rows, in a bed well prepared in the garden; they will sprout in a fortnight; they must be attended to like other vegetables. When about two inches high, they may be thinned and transplanted into rows. As they increase in size, they should be hilled. In the autumn many of them will be of the size of a walnut, and from that to a pea. In the following spring they should be planted in hills,

placing the large ones together; they will in the second season attain their full size, and will exhibit several varieties of form, and may then be selected to suit the judgment of the cultivator. I would prefer gathering the balls from potatoes of a good kind. The first crops from seeds thus obtained will be productive, and will continue so for many years, gradually deteriorating, until they will need a renewal by the process.

Pot-Pourri (Perfume)—to make.—One-half pound of common salt, one-fourth of saltpeter, one fourth ounce of storax, half a dozen cloves, a handful of dried bay-leaves, a handful of dried lavender-flowers. Mix these well together to form the basis of the pot-pourri. It will last for years. Rose-leaves and the leaves of any other fragrant flowers gathered on dry days, may be added from time to time. If approved, powdered benzoin, chips of sandal-wood, cinnamon, orris-root—indeed, any aromatic plant dried, may be mixed in.

Pots (Iron)—to mend.—Mix finely sifted lime with some white of an egg, till a thin kind of paste is formed, then add some iron filings. Apply this to the fracture, and the vessel will be found nearly as sound as ever.

Potted Beef.—Take four pounds of good lean beef, cut it up well and put over it a dessertspoonful of saltpeter, a tablespoonful of salt, and a tablespoonful of sugar. Let this pickle remain on the meat for twenty-four hours. Now put the meat in a jar, cover the top with suet off the meat, cover it closely, and put it in the oven to bake for three or more hours; pour off the gravy, which may serve for many purposes; take the meat and pound it well in a mortar; then add three-quarters of a pound of fresh butter; a little cayenne or other pepper (not too much); taste and see if there is sufficient salt. Wait until it is quite cold before pressing it into pots. Cover it over with melted suet. It will be found very nice.

Poudrette (Home-made).—Few fertilizers are wasted with the prodigality of extravagance which attends the use of night soil, while the exercise of a little care and attention is all that is required to secure one of the most powerful fertilizers in existence. Night soil contains phosphate of lime, which is essential to the growth of animals' bones, and which is not supplied from the atmosphere like carbonic acid and ammonia. In order to receive the droppings in a manageable and inoffensive state, the vault should be provided with a large, tight box made of matched plank, placed to slide on scantling, so that it can be drawn out, by attaching a horse, whenever required. Provide plenty of dry, black loam from the woods or swamps; refuse charcoal; dry peat, or alluvial deposits answer first rate. Keep them dry, in barrels or boxes on the spot, under cover; spread a thick layer on the bottom of the receiving box, and at intervals of a few days throw in a liberal supply of these absorbents on the accumulating deposit. If a few handfuls of plaster are thrown in occasionally, it will suppress unpleasant odors and increase the value of the manure. The emptying of slops and dishwater in the box should be

strictly prohibited. When the box is filled, you can remove it, and convert it into poudrette. For this purpose it must be worked over with an additional quantity of muck, or other absorbent, in such proportions that it will form, with what has been previously added, about three-quarters of the entire compound. The working should be done under a shed, and the whole kept perfectly dry. It should be shoveled over and mixed several times at intervals, and finally screened, and made as uniform throughout as possible; the finer it is pulverized, and the drier it is kept, the better.

Poultice (Different Kinds)—to make.—BREAD POULTICE.—Take stale bread and crumbs, pour boiling water over it, and boil till soft, stirring it well; then take it from the fire, and gradually stir in a little hog's lard or sweet oil, so as to render the poultice pliable when applied.

CORNMEAL POULTICE.—Indian meal, five tablespoonfuls; rye flour, one tablespoonful. To be gradually let through the fingers into boiling water, briskly stirring at the same time. Then add a little oil, as for the bread poultice.

APPLE POULTICE.—Apples pared and cored, and well boiled, then well washed into a pulp, form a very good poultice.

STARCH POULTICE.—Starch, any quantity; thicken with boiling water. When a little cool, stir in a little lard or oil.

SLIPPERY-ELM POULTICE.—Take slippery elm in powder, and mix with water until somewhat thick, then boil it a few minutes. It is to be applied warm.

YEAST POULTICE.—Wheat flour, one pound; yeast, half a pint. Mix them together over a gentle heat until the mixture begins to rise, then apply warm.

MUSTARD POULTICE.—Flour of mustard, one part; flaxseed meal, one part. Make into a paste with water. A little oil or lard should be added to prevent its sticking.

HOP POULTICE.—Boil a handful of hops for a few minutes in a pint of water in a covered vessel; squeeze out the juice and strain. This liquor is now to be put again on the fire and thickened with Indian meal, and a little lard added as it becomes cool.

SPICE POULTICE.—Cinnamon, allspice, cloves, and ginger, of each equal quantities; honey or molasses to mix.

ALUM POULTICE.—Put the white of a couple of eggs into a plate, and then with a piece of alum between the thumb and finger stir it into a curd. To be applied wrapped in a fine piece of linen, having but one fold, next the skin.

POULTICE FOR OLD SORES.—Scrape yellow carrots, wilt them in a pan or fire-shovel, very soft. It takes out the inflammation and swelling, and is an excellent poultice for a sceris breast.

Poultice—how to make and apply.—In order to relieve spasm, as in colic—intestinal, biliary, or renal; to relieve inflammation of the pleura, the lungs, liver, or other organs, we want to apply the poultice as hot as possible, while we protect the skin from being scalded.

In order to do this, a flannel bag should be prepared, a convenient size being twelve by eight inches. This should be closed at the sides and at one end, and left open at the other, and one side of the flannel should be about an inch and a half longer in order to fold it over and baste, when filled with the poultice, and it is convenient to have four tapes attached to the points which form the corners when the bag is closed in order to keep the poultice in position. Besides this, another strip of flannel should be prepared of the same breadth of the length of the bag, and long enough to wrap around it once or more.

Crushed linseed, bowl and spoon should then be got together, and the bowl and spoon thoroughly heated by means of boiling water. The poultice should then be made with actively boiling water, and should be mixed rather soft. As soon as it is ready it should be poured into the bag which has been heated by holding before the fire. The flap formed by the long side of the bag is now folded over and fastened in place by a few long stitches with coarse thread. It should then be quickly wrapped in the strip of flannel (also warmed) and fastened in place if necessary by means of the strings. It may be covered outside with a sheet of cotton batting. In this way the poultice may be applied boiling hot to the skin without burning. The two layers of flannel, which are at first dry, allow the heat to pass very gradually indeed to the skin.

As the moisture of the poultice soaks through them they become better conductors, and the heat passes more quickly, but the increase is so gradual that it causes no painful sensation whatever, but only one of soothing and comfort. The poultice also keeps much longer hot, and the necessity for changing it arises much less frequently. The difference between the effect of a poultice made in the ordinary way, and in the manner just described, is striking. It is perhaps less marked in cases of inflammation than spasm.

We have seen a patient suffering from intense abdominal pain, at once relieved by a poultice made in the manner described, although a succession of poultices made in the ordinary way had been utterly useless.

Poultice (Onion).—This poultice, useful for the earache and also for quinsy, is made by roasting one or two large onions till quite soft, peeling them, and bruising them to a pulp. The pulp must be put quite hot into a muslin bag, and applied to the part requiring it.

Poultice (Soap).—An excellent poultice for use in cases of cold on the lungs, or for croup or hoarseness in children, is made thus: Take a small quantity of soft soap and thicken it with Indian meal or flour, and spread it upon a cloth, or a better way is to put it into a small bag, and lay it upon the flesh. There is less danger of taking cold after removing it, than with other poultices, and "it works like a charm.

Poultry Raising—directions.—In raising poultry or stock of any kind, it should be the aim of everyone to keep it healthy and improve

it. You can do it very easily by adopting some systematic rules. These may be summed up in brief as follows:

1. Construct your house good and warm, as to avoid damp floors, and afford a flood of sunlight. Sunshine is better than medicine.

2. Provide a dusting and scratching place where you can bury wheat and corn and thus induce the fowls to take the needful exercise.

3. Provide yourself with some good, healthy chickens, none to be over three or four years old, giving one cock to every twelve hens.

4. Give plenty of fresh air at all times, especially in summer.

5. Give plenty of fresh water daily, and never allow the fowls to go thirsty.

6. Feed them systematically two or three times a day; scatter the food so they can't eat too fast, or without proper exercise. Do not feed more than they will eat up clean, or they will get tired of that kind of food.

7. Give them a variety of both dry and cooked feed; a mixture of cooked meat and vegetables is an excellent thing for their morning meal.

8. Give soft feed in the morning, and the whole grain at night, except a little wheat or cracked corn placed in the scratching-places to give them exercise during the day.

9. Above all things keep the hen-house clean and well ventilated.

10. Do not crowd too many in one house. If you do, look out for disease.

11. Use carbolic powder occasionally in the dusting bins to destroy lice.

12. Wash your roosts and bottom of laying nests, and whitewash once a week in summer, and once a month in winter.

13. Let the old and young have as large a range as possible—the larger the better.

14. Don't breed too many kinds of fowls at the same time, unless you are going into the business. Three or four will give you your hands full.

15. Introduce new blood into your stock every year or so, by either buying a cockerel or sittings of eggs from some reliable breeder.

16. In buying birds or eggs, go to some reliable breeder who has his reputation at stake. You may have to pay a little more for birds, but you can depend on what you get. Culls are not cheap at any price.

17. Save the best birds for next year's breeding, and send the others to market. In shipping fancy poultry to market send it dressed.

18. For very young chicks we make the clabbered milk into "Dutch cheese" and use the whey to mix feed for older fowls and chickens. From the time they are a week old till sent to market for broilers our early chicks have all the milk, sweet or sour, or butter-

milk, that they can drink. If the home supply of milk falls short of the demand, we buy skim milk at two cents a quart, and consider it cheap at that.

19. For laying hens in winter there is nothing better than a liberal supply of milk. A pan of warm milk, with a dash of pepper in it, every morning, will do more toward inducing hens to lay in cold weather than all the egg-food in creation.

20. For fattening fowls we find that boiled vegetables mixed with milk and barley or cornmeal, will put on flesh at an astonishing rate.

21. The best way to prevent or cure gapes in chickens, is to commence feeding them whole grains of corn as soon as they are old enough to swallow them—say two or three weeks old. The effort made by the chick to swallow the whole grain will kill the little red worms in the throat, which are the cause of the gapes, and it is easier and safer to kill the worms in that way than to attempt to take them from the throat with a bent horse-hair, as is sometimes done. It may be added that coarse cracked corn is very good feed for chicks very young, the coarser parts having somewhat the same effect as whole grains on older ones.

22. Sunflower seeds, fed in small quantities, impart a fine glow to the plumage of poultry.

23. A good way to make a cheap and simple chicken nest is to take a common box about two feet high, one foot wide, and one foot deep; have the back to work on hinges, for which two strips of leather will do; nail on to the front a board half the height of the box; but two screw-eyes in the top to hang it up. Then fill it with cut straw, and you have a nest easy to clean.

24. If one has several broods of chickens they ought to have the shelter of some glass roofing. They need not be confined under the glass all the time, but should have easy access to outdoor exercise if it is not too cold. A small building or shed after the style of a greenhouse will be found very convenient and useful in rearing early broods.

25. The nest of a setting hen should be nearly flat at the bottom, so that the eggs will move easily when the hen puts her feet among them. If too rounding, the eggs will crowd together, and when the biddy puts her foot down with the characteristic force of her sex, something has to give way, and usually it is the shells of the eggs.

26. The coops for young broods should have broad bottoms and these should be separate from the coop. On clear days let the hen and her brood out; turn up the coop and clean off the bottom thoroughly; let it dry, and sprinkle on a layer of dry earth.

27. A lath fence made in sections of eight feet, and wired to light posts, makes a good temporary fence for a poultry yard. It is cheap and will last for several years. It will confine the heavier breeds.

28. Feed setting hens on corn. It digests slowly, is of an oily and heating nature, and much better than any other food for the purpose.

29. Little chickens need no feed until they are twenty-four hours

old. Some of the brood may be late in hatching. In this case take the older ones and feed them by themselves. When all are hatched and when they have been dried and vitalized by the hen, remove to a nice, roomy, clean, warm coop. Feed the hen as much corn as she wants to eat and give her water. Feed the little things some bread crumbs, and corn meal or crushed wheat slightly moistened with sweet milk. Continue this for a few days, feeding a little at a time and often. As soon as the chicks can swallow whole wheat give them a feed of that in the evening. Coarsely ground or broken corn scalded is a good food for the broods. The morning feed should always be warm. Feed the little things apart from the hen or she will get more than her share. Give but little water. Keep the hen in the coop, and allow the chicks to run about in its vicinity. When they get cold they will return to be hovered and warmed. Keep things clean and neat in and about the coop, and close it up carefully every night, Visit it early in the morning with a nice warm breakfast for the chickens. It is work, but light work, to rear chickens, though care and regularity are necessary to success.

30. The best remedy for gapes ever tried, is caustic lime in a dry, powdered state. It may be either air or water slaked. Hold the chicken in the left hand, open its mouth by the thumb and fore-finger, and with the other hand drop a pinch of lime into it. Hold in this position a few seconds, until it is obliged to breathe, when it will inhale some of the lime, then let it go. One application of the lime in this manner has cured every case of the gapes—some of them in the last stages.

31. Old nails, etc., laid in the drinking fountain will do no harm, but sometimes good, as iron is a tonic for poultry. Old rusty iron may not dissolve in water, but if the rust is fine and mingles with the water, iron is sometimes taken into the system in that way. A solution of copperas, however, is better, as copperas is sulphate of iron.

Powders (Custard).—Sago meal and flour, one pound each; color with turmeric to a cream color. Flavor with essential oil of almonds, one dram; essence of lemon, two drams. Use with sweetened milk to form extemporaneous custards.

Powder (Curry).—Turmeric, and coriander seeds, of each, four ounces; black pepper, two and one-half ounces; ginger fourteen drams; cinnamon, mace, and cloves, each one-half ounce; cardamon seeds, one ounce; cummin seeds, two drams; cayenne pepper, one ounce; powder and mix.

Powder—for the complexion.—Take white bismuth, one pound; starch powder, one ounce; orris powder, one ounce. Mix and sift through lawn. Add a drop of attar of roses or neroli.

Powder—for gold plating.—Prepare a chloride of gold the same as for plating with battery. Add to it, when thoroughly washed out, cyanuret potassa in a proportion of two ounces to five pennyweights of gold. Pour in a pint of clear rain water, shake up well, and then let stand till the chloride is dissolved. Add then one pound of pre-

pared Spanish whiting, and then let evaporate in the open air till dry, after which put away in a tight vessel for use. To apply it you prepare the article in the usual way, and having made the powder into a paste with water, rub it upon the surface with a piece of chamois skin and cotton flannel.

Powder—for Silvering.—Nitrate of silver and common salt of each thirty grains; cream tartar, three and one-half drams; pulverize finely and bottle for use. Unequaled for polishing copper and plated goods.

Preston Salts.—Take of sal ammoniac and salts of tartar, of each about two ounces; pound up the sal ammoniac into small bits, and mix them gently with the salts of tartar. After being well mixed, add a few drops of oil of lavender, sufficient to scent, and also a little musk; stop up in a glass bottle, and when required for use, add a few drops of water, or spirits of hartshorn, when you will immediately have strong smelling salts. The musk, being expensive, may be omitted; it will still be good. Any person can for a few cents obtain these ingredients at any druggists.

Hints About Making Preserves.—It is not generally known that boiling fruit a long time, and skimming it well, without the sugar and without a cover to the preserving pan, is a very economical and excellent way—economical, because the bulk of the scum rises from the fruit, and not from the sugar, if the latter is good; and boiling it without a cover, allows the evaporation of all the watery particles therefrom; the preserves keep firm, and are well flavored. The proportions are, three-quarters of a pound of sugar to a pound of fruit. Jam made in this way, of currants, strawberries, raspberries, or gooseberries, is excellent.

Preserves (Raspberry).—Allow one pound of fruit to three-quarters of a pound of sugar. Pick the fruit from the stems, wash and drain it in a colander. Place it in a preserving kettle. To five pounds of fruit put in one-half pint of cold water. Stir the sugar in gradually while the fruit is coming to a boil. When it is up to boiling heat—just heated through—skim the fruit into a colander. Boil the syrup fifteen or twenty minutes. Then place fruit in syrup. Let it just boil again. Then place while hot in air-tight jars. This preserve has a delicious tartiness which is especially relished by invalids.

Prints—to wash.—It often happens that black and white calico, and other printed goods which have a white pattern on a black ground, will not bear washing unless some precautions are taken to prevent "running;" or, in other words, the white spots acquire a reddish color, and the black ground becomes dull and foxy. A case of this kind having occurred a sufficient quantity of water was put in a wash-boiler, and heated to the boiling point. There were then dissolved in it fifty drams red chromate of potash, eighty drams common salt, and sixty drams crystals of sal soda. The dress was put into this hot bath for five minutes and stirred, and then washed in

clean water until the white spots appeared perfectly bright and clear.

Prints (Old)—to clean.—Sponge them on both sides with clean water, and then saturate them with the following mixture: One-quarter pound chloride of lime, two ounces oxalic acid, and one quart of water. Well sponge down with clean water, and a clean picture will be the result. On no account use the above preparations on water colors, or prints colored by hand.

Prints—to transfer.—Take of gum sandarac, four ounces; mastic, one ounce; Venice turpentine, one ounce; alcohol, fifteen ounces. Digest in a bottle, frequently shaking, and it is ready for use. Directions: Use, if possible, good plate glass of the size of the picture to be transferred, go over it with the above varnish, beginning at one side, press down the picture firmly and evenly as you proceed, so that no air can possibly lodge between; put aside, let dry perfectly, then moisten the paper cautiously with water, and remove it piecemeal by rubbing carefully with the fingers; if managed nicely, a complete transfer of the picture to the glass will be effected.

Prunes—to prepare.—Wash them well, put them in a stone jar, cover well with water, and sprinkle generously with sugar; then bake them in the oven. Cover the jar with a pie-plate to keep the prunes from scorching. Should the juice boil down too much, add a little more water.

Pudding (Bird's Nest)—to make.—Take six or seven cooking apples, pare them, and remove the cores without breaking the apples. Place them in a pie-dish; next wash thoroughly four heaped teaspoonfuls of sago; mix with sufficient cold water to fill the dish containing the apples, and bake in a moderate oven. Cherries, prunes, etc., may be used instead of apples, or tapioca instead of sago, and, if well made, the pudding is palatable, wholesome, and inexpensive. To be served with sugar and milk, or cream, if practicable.

Pudding (Cocoanut).—Two quarts rich, tart apples, chopped as for mince-pie; one cup sago, swelled with two cups boiling water; one cup sugar, and one and a half cups desiccated cocoanut; mix intimately and bake one hour in an earthen pudding dish. Serve cold. This is a pudding worthy to grace any occasion when a pudding can be served, and containing no butter or fat, and is not difficult of digestion.

Pudding (Cocoanut).—Soak three tablespoonfuls tapioca in cold water over night; boil one quart of milk; add tapioca and boil five minutes; then add yolks of four eggs, three tablespoonfuls desiccated cocoanut; boil ten minutes, turn into a dish to cool, beat the whites and two tablespoonfuls of sugar to a foam; spread on the top and scatter over with cocoanut; set in the oven to brown a little.

Pudding (Christiana).—Put a layer of sliced bread or biscuit, first dipped well in boiling sweet milk, in a baking-dish, then a layer of prune sauce made as for eating, only seeding the prunes, then bread, and so on till the dish is full, bread on top, having sprinkled each layer with a little sugar; pour over this the prune juice and the re-

mainder of the scalded milk. To make it richer, bits of butter may be added to each layer; bake in moderate oven for three-quarters of an hour to an hour. When cold, turn out in a dish and spread whipped cream on top, or it may be served hot with a sauce or spoonful of whipped cream to each dish. This is a splendid pudding, wholesome and inexpensive.

Pudding (Cottage).—One cup of sugar, one cup of sweet milk, one pint of flour, two tablespoonfuls of melted butter, one teaspoonful of soda, two teaspoonfuls of cream tartar, one egg.

Pudding (Corn).—Grate fifteen ears of sweet corn, scraping off carefully all the milk that may remain on the cob, but do not take the hull with it. Add to this one cup and a quarter of white Indian meal, four well-beaten eggs, three spoonfuls of sweet butter, and enough rich milk to make a thin batter; add pepper and salt, and stir in the eggs the last thing, and bake. Stir it several times before it is half done; after that leave it unmolested till done.

Pudding (Dandy).—One and one-half pint of milk, four eggs, sugar to taste. Boil the milk and yolks and one teaspoonful of corn starch. Beat the whites to a stiff froth, after the cream is cooked, put it in a dish to cool. Then drop the whites, after sweetening, on the cream. Brown the top a few minutes.

Pudding (English Plum).—One-half pound currants, one pound raisins, one-half pound of beef suet, butter the size of an egg, three eggs, one nutmeg, two teaspoonfuls of lemon, three-fourths of a pint of milk, a little salt, flour sufficient to stiffen, mix well together; put into a bowl and bake four hours; cover bowl with a cloth.

Sauce.—Three tablespoonfuls corn starch, one-half pint milk, one-half cup of sugar, one tablespoonful of butter; boil five minutes.

Pudding (Indian)—very fine.—Boil two quarts of milk, and while boiling stir in corn meal enough to make it of the consistency of mush; take one cup of suet, one cup of molasses, one tablespoonful each of cinnamon and ginger and stir into the pudding, scald all together well, and then set away to get quite cool; add three well-beaten eggs, butter, size of egg, one cup each of currants and raisins, salt and sugar enough to serve without sauce if you wish; then bake three hours slowly. Brandy sauce makes it equal to English plum pudding.

Pudding (Indian).—One quart of boiling milk, one cup of meal; two tablespoonfuls of flour, one tablespoonful of butter, one egg, one-half cupful of molasses, and a little salt. Bake one hour. I mix the meal, flour, butter, egg, and molasses together, and then turn the boiling milk on them.

Pudding (Ginger).—Five eggs, two cupfuls of sugar, two cupfuls of butter, four cupfuls of flour, one cupful of molasses, one cupful of sour milk, one teaspoonful of soda, ginger and allspice to taste. Bake in a pan, or steam in a mold or pan.

Sauce for Ginger Pudding.—One-half pint of molasses, one pint of

sugar, one-half pint of butter, ginger to suit the taste, and a little water. Boil all together until the sauce becomes somewhat thick.

Pudding (Marlboro).—Six large apples stewed and strained, a cupful of white sugar, a half cupful of butter, the juice of two lemons, and the grated rind, also a little rose water, and three tablespoonfuls of hot water, one milk biscuit or Boston cracker, rolled fine, six eggs, beaten and stirred in. Line deep plates with a rich crust, have a pretty thick edging, pour in the mixture, and bake.

Pudding (King George).—One pint of bread crumbs, half pint of flour, teaspoonful of baking powder, sifted in flour, a little salt, half a pound of raisins, quarter of a pound of currants, quarter of a pound of suet, coffeecupful of milk, one egg; tie tightly in a bag and boil three hours. To be eaten with hard sauce.

Pudding (Orange).—Peel and slice six oranges, sprinkle over them half a cupful of sugar, boil one pint of milk, add one whole egg and the yolks of two, half a cupful of sugar, and two tablespoonfuls of corn-starch, boil until it thickens, then pour it over the oranges. Beat the whites of two eggs to a stiff froth, add a very little sugar, spread this over the top, and place in the oven for a few minutes to brown slightly. Half the above quantity is enough for three or four persons.

Pudding (Queen).—One pint of nice fine bread-crumbs, one quart of milk, one cup of sugar, the yolks of four eggs, beaten, the grated rind of a lemon, a piece of butter the size of an egg; bake until done, but not watery; whip the whites of the eggs stiff; beat in a teacupful of sugar, in which has been strained the juice of the lemon; spread over the pudding a layer of jelly; pour the whites of the eggs over this; replace in the oven; bake lightly; to be eaten cold, with cream; if preferred. This is decidedly the best of all puddings.

Pudding (New Rice).—1. Mix four large teaspoonfuls of rice flour with half a pint of cold milk, and stir it into a quart of boiling milk until it boils again; then remove, stir in butter the size of an egg and add a little salt; let it cool, and add four eggs, well beaten, two-thirds of a cupful of sugar, grated nutmeg, half wineglassful of brandy or other flavoring; bake in a buttered dish twenty minutes. To be eaten hot with sauce.

2. One quart of milk, half a cupful of white sugar, one teaspoonful of rose or vanilla extract, one teaspoonful of butter, half of a cupful of rice; merely wash the rice, and after adding it to the sweetened pudding, put in the oven, occasionally stirring for the first ten minutes. It will be of the consistency of ice cream, and very delicate. Bake until browned on top.

Pudding (Tapioca).—Soak four tablespoonfuls of tapioca in a little water over night; boil one quart of milk and pour over it while hot; when cool add half of a cupful of sugar, one egg, and the yolk of one egg, well beaten; bake slowly one hour, spread with the whites of two eggs, beaten, return to the oven, brown slightly, flavor with orange.

Puffs (Albany).—Beat the yolks of six eggs until they are very light; stir in a pint of sweet milk, a large pinch of salt, the whites of the eggs beaten to a froth, and flour enough to make a batter about as thick as boiled custard. Bake in gem-pans in a quick oven.

Pulleys (Paper Friction).—These superior mechanical contrivances are made by cutting pieces of pasteboard into a circular form, and of the desired diameter of the pulley, and placing them in layers one on the top of another, cementing properly with a good coat of glue between each layer, pounding or pressing them together as close as possible, and leaving a preforation in the center of each for the shaft. When you have got enough of these layers together to give you the proper breadth of the pulley, allow the glue to harden, then turn it off to a smooth finish in a lathe. Secure each side of the pulley with a good stout iron flange, large enough to cover the entire diameter, or nearly so, and with proper usage it will last a long time.

Pulleys—hardening wood for.—After a wooden pulley is turned and rubbed smooth, boil it for about eight minutes in olive oil; then allow it to dry, and it will become almost as hard as copper.

Pulmonary Complaints.—When an effusion of blood from the lungs takes place, a prompt an infallible resource might readily be provided, so as to meet the occasion with a safe and decided effect. From twenty to thirty-five drops of the spirits of turpentine in a glass of water will produce an instantaneous collapse of the mouth of the blood vessel. It is also asserted that, in the above case, a tumbler-ful of strong gin toddy, or gin and water, will have the same effect.

Punch.—Water, three gallons; tartaric acid, four ounces, or to taste; lump sugar to sweeten; brandy, three pints; rum, three pints. The peels of three lemons grated; essence of lemon to flavor; rub the essence with a little lump sugar in a mortar, adding a little of the spirit.

Putty—to make.—Ten pounds of whiting, one pound of white lead, boiled linseed-oil, a wineglass of sweet-oil. Work up these ingredients with sufficient boiled linseed-oil to form a paste of the requisite consistency; the sweet oil prevents the white lead from hardening. All putty should be made some time before it is used, and sashes to be puttied should have one coat of paint, which will cause the putty to adhere more firmly. Old putty may be softened by applying rags dipped in a solution of caustic potash for some hours, or by rubbing a hot iron along the putty.

Putty (French).— Seven pounds linseed-oil and four pounds brown umber are boiled for two hours, and sixty-two grammes wax stirred in. After removing from the fire, five and one-half pounds fine chalk and eleven pounds white lead are added and thoroughly incorporated; said to be very hard and permanent.

Putty (Old)—to remove.—Dip a small brush in nitric or muriatic acid and with it anoint or paint over the dry putty that adheres to the

broken glass and frames of your windows, and after an hour's interval, the putty will have become so soft as to be easily removable.

Putty—for repairing broken walls.—The best putty for walls is composed of equal parts of whiting and plaster of Paris, as it quickly hardens. The walls may be immediately colored upon it. Some painters use whiting with size; but this is not good, as it rises above the surface of the walls, and shows the patches when the work is finished. Lime must not be used as putty to repair walls, as it will destroy almost every color it comes in contact with.

Quassia—its uses.—Quassia is a simple tonic, and can be used with safety by any one, as it does not increase the animal heat or quicken the circulation. Used internally in the form of infusion, it has been found of great benefit in indigestion and nervous irritability, and is useful after bilious fevers and diarrhœa.

Dose.—Of the infusion, from one and a half to two ounces, three times a day.

Quince Jelly.—Most housekeepers use the entire fruit, and also the skins and cores from other preparations. It is better to leave out the cores, as the mucilage around the seeds may injure the jellying; but use the parings, as the richest portions are next to the skin. Use any fragments also. It is economical to use double the quantity of apples which are rich in jelly; cook the apples and then the quinces in the same water and strain out the juice of both fruits. As before hinted, it is important to do all cooking before adding the sugar, and afterward continue the simmering until the jelly point is reached. The sugar may be added to the strained syrup, bulk for bulk, without weighing. It saves much labor to skim only once before adding the sugar, and not again until the jelly is made and taken from the fire. Let it cool a little before putting into cups or jelly glasses. Preserve from molding by covering well.

Quince Marmalade.—Cook the fruit soft; crush to a pulp, and add sugar as for preserves; then slowly cook to a thick paste, constantly stirring to prevent sticking or burning. One-third sweet apples added, without more sugar, improves the quality for most people.

Quince Preserves.—Pare, core and weigh; first stew soft in water and then add as many pounds of sugar as there were of the uncooked fruit, and simply scald through. Quinces, currents, grapes, and other fruits to be jellied should not have sugar added until the chief cooking is done. Lack of knowing this, causes many failures to get good jellies and preserves, by inexperienced housekeepers. To prevent mold, cover the top of the jars of preserves or jellies with writing paper dipped in alcohol. Keep in a cool, dry place. This is a beautiful preserve.

Quince Sauce (Bottled).—Cook the prepared quinces as above; pour off the water and cover the fruit with a syrup of a pound of sugar to a pint of water. Boil up quickly, then take the fruit out carefully, and put it into preserving jars or cans. Pour the syrup over it and close the jars tightly. This gives a clear light-colored fruit which will

last for years. The cooking water may be used for stewing more fruit, to which may be added one or two times its bulk of apples, making a nice quince-flavored sauce, or a "quince apple butter," by mashing, and stirring while boiling it down to the desired consistency, and sweetening to the taste. This may be used as wanted, for a short season, or it may be preserved in the closed fruit bottles.

Quinces—secret of raising.—Purchase the orange variety, and set the trees from six to eight feet apart in rich soil. Bandage the stem with two or three wrappings of old cloth as far down in the ground as possible, as the roots starts from near the surface. Let the bandages run six or eight inches above the ground, then pack the soil a couple of inches around the bandages. This should be renewed every spring.

Quinsy—or ulcerated sore throat.—Those who suffer from these distressing maladies will find relief from an onion poultice made as follows: Bake, or roast, till quite soft, three or four large onions, peel them quickly, and beat them quite flat with a rolling-pin; put them into a muslin bag that will reach from ear to ear and about three inches deep. Apply this bag to the throat as hot as possible. Keep it on night and day, using fresh ones as the strength of the onions becomes exhausted. The throat must be protected from cold when the poultices are removed.

Quinsy—relief for.—A teacupful of red sage leaves to one quart of water, boil ten minutes, add four tablespoonfuls of vinegar, and sweeten with honey. In the first stage of the disease, it might be used as a gargle, and then to rinse the mouth; it should be used warm. It will be found invaluable.

Quinsy Remedy.—Our cure is tar spread on the throat and quite up under the ears. Cover with a cloth and go to sleep and wake up well. Only a brown stain will remain; it is easily washed off with castile soap. It is a sure relief. It is our opinion that in cases of incipient scarlet fever or diphtheria this is the remedy. It looks reasonable if it brings sure relief in quinsy, which it does.

Rabbits—how to select.—Rabbits, when old, have the haunches thick, the ears dry and tough, and the claws blunt and ragged. A young hare has claws smooth and sharp, ears that easily tear, and a narrow cleft in the lip. A leveret is distinguished from a hare by a knob or small bone near the foot.

Rabbit-skins—to prepare.—Lay the skin on a smooth board, the fur side undermost, and tack it in every direction with tinned tacks. Dissolve two ounces of alum in a pint of warm water, and with a sponge dipped in this solution moisten the surface all over; repeat this every now and then for three days; when the skin is quite dry, take out the tacks, and rolling it up loosely the long way, the hair inside, draw it quickly backward and forward through a large smooth ring, or anything of a similar kind, until it is quite soft; then roll it the contrary way of the skin, and repeat the operation. Skins prepared thus are useful for many domestic purposes.

Radway's Ready Relief.—According to Peckolt, is an ethereal tincture of capsicum, with alcohol and camphor.

Radishes—to force.—Radishes may be grown in a few days by the following method: Let some good radish seed soak in water for twenty-four hours, and then put them in a bag and expose to the sun. In the course of the day germination will commence. The seed must then be sown in a well-manured hot-bed, and watered from time to time in lukewarm water. By this treatment the radishes will, in a very short time, acquire quite a large bulk, and be very good to eat.

Raisins—to stone easily.—To stone raisins easily, pour boiling water over them and drain it off. This loosens them, and they come out with ease.

Rashes—how to distinguish.—Measles appear as a number of dull red spots, in many places running into each other, and is usually first seen about the face and on the forehead, near the roots of the hair, and is often preceded by running of the eyes and nose, and all the signs of a severe cold. Scarlet fever appears first about the neck and chest, but not unfrequently at the bend of the elbow or under the knee, and is usually preceded by sore throat. It can be distinguished from roseola, a mild disease which is sometimes mistaken for it, by the bright-red color of the skin, which appears not unlike a boiled lobster. In chicken-pox, the symptom is attended by fever, the spots are small, separate pimples, and come out generally over the whole body."

Rats—to drive away.—Rats have so strong an aversion to the odor of peppermint, they will not enter rooms or bins where it prevails. The peppermint plant we place in the oats, rye and corn, when they are brought in, and some goes under the pig-stye. Though we no longer have any rats we continue to use the plant, for fear they may make us a visit. If this is so, in the absence of the plant, probably a few drops of the oil of peppermint would answer the same purpose.

Rat Exterminator.—Baron von Baekhofen, has discovered a cheap and simple method of exterminating rats. It consists of a mixture of two parts of well-bruised common squills and three parts finely chopped bacon made into a stiff mass, with as much meal as may be required, and then baked into small cakes; these are put down for the rats to eat, and are said to effect their complete extirpation.

Rats—to rid a house.—Wet a few pounds of unslaked lime with a strong lye made from potash; let it be quite soft; spread it around the holes so that the rats cannot avoid treading in it; let it remain a week or so, and if it gets dry, scrape it off and moisten again. The mixture burns their feet, and they will not be likely to make a second visit: Do not let it come in contact with oil-cloth or paint.

Rat Killing—without traps or poison.—Take common sponge, dried, cut into small pieces, soak in lard, melted tallow or meat gravy.

Place these pieces within easy access to the rats. They will eat greedily, and the moisture of the stomach will cause the pieces to swell and kill the rat. Water may be placed in reach, and will hasten results by expanding the sponge.

Razor Paper.—This article supersedes the use of the ordinary strop. By merely wiping the razor on the paper, to remove the latter after shaving, a keen edge is always maintained without further trouble. Only one caution is necessary—that is, to begin with a sharp razor, and then "the paper" will keep it in that state for years. It may be prepared thus: First, procure oxide of iron (by the addition of carbonate of soda to the solution of persulphate of iron), well wash the precipitate, and finally leave it of the consistency of cream. Secondly, procure a good paper, soft and thin, then with a soft brush spread over the paper (on one side only) very thinly the moist oxide of iron—dry, and cut into two-inch square pieces. It is then fit for use.

Razor-strop Paste.—Wet the strop with a little sweet oil, and apply a little flour of emery evenly over the surface.

Razor-strop—to renovate.—1. Rub a little clean tallow over the surface, and then put on it the light top part of the snuff of a candle; rub it smooth; excellent.

2. Rub the strop well with a piece of soft pewter or lead.

Razor—to sharpen.—It has long been known that the simplest method of sharpening a razor is to put it for half an hour in water, to which one-twentieth of its weight of muriatic or sulphuric acid has been added, then lightly wipe it off, and after a few hours set it on a hone. The acid here supplies the place of a whetstone by corroding the whole surface uniformly, so that nothing further than a smooth polish is necessary. The process never injures good blades, while badly hardened ones are frequently improved by it, although the cause of this improvement remains unexplained.

Respirator—to make.—An excellent respirator may be made of a thick sheet of carded cotton wool placed between two pieces of muslin. Unequaled for arresting dust, steel particles, etc.

Resting Long at Noon.—Farmers, mechanics, and those who labor out of doors in warm weather should take long rests at noon. Travelers tell us that people of no other country do so much work in the sun as those of America. Among the Spaniards the practice of sleeping at noon is almost as common as that of sleeping at night. In Northern Europe a shorter time is given to rest at noon, because the temperature is lower, and the rays of the sunlight fall so as to produce a less injurious effect upon laborers. Still, the time for rest is longer in this part of Europe than in the United States. With us there is no stopping work for the sake of taking rest at noon. Labor is suspended only to allow men and animals to take food and water. As soon as eating and drinking are finished, work in the open sun is resumed. Without doubt we should be gainers, both in the matter of health and wealth, if we gave a considerable time during the middle

of the day to rest. More sickness occurs among farmers immediately after haying and harvest than at any other season of the year, and the cause of it may be attributed, in a great majority of cases, to exposure to the heat of the sun when it is almost directly over the heads of workmen engaged in the fields. The number of cases of sunstroke increases every year, Many who are not prostrated by the heat are greatly injured by it. What is true of men in this respect is also true of animals. A good long rest at noon would prevent exposure to the sun at the time when injurious effects are most likely to follow. It would also put both men and animals in a condition to do more work during the cooler portions of the afternoon.

Retching—to stop.—Take half a wineglassful of pure lemon juice, mix with it just sufficient salt of tartar to destroy the acidity. Give a teaspoonful of this frequently till the retching ceases.

Reviver (Black)—for cloth.—Bruised galls, one pound; logwood, two pounds; green vitriol, one-half pound; water, five quarts; boil two hours; strain, and it is ready for use.

Rheumatic Fluid (German).—Oils of hemlock and cedar, of each, half an ounce; oils of origanum and sassafras, each, one ounce; aqua ammonia, one ounce; capsicum pulverized, one ounce; spirits of turpentine and gum camphor, each, half an ounce; put all into a quart bottle, and fill with ninety-five per cent. alcohol. Dose, for colic, for man, half a teaspoonful; for a horse, one-half to one ounce, in a little warm water every fifteen minutes, till relieved.

Rheumatism (Inflammatory).—Sulphur and saltpeter, of each, one ounce; gum guaiac, one-fourth ounce; colchicum root, or seed, and nutmegs, of each, one-fourth ounce; all to be pulverized and mixed with simple syrup, or molasses, two ounces. Dose: One teaspoonful every two hours until it moves the bowels rather freely; then three or four times daily until cured.

Rheumatism in Horses—to cure.—Crude coal-oil, one pint; strong vinegar, one-half pint; turpentine, one-half pint; mixed, and well shaken. To be rubbed on mornings and nights.

Rheumatism—remedies for.—1. In acute rheumatism, oil of peppermint in ten drop doses on sugar every four hours will be found very beneficial.

2. Take cucumbers, when full grown, and put them into a pot with a little salt; then put the pot over a slow fire, where it should remain for about an hour; then take the cucumbers and press them, the juice from which must be put into bottles, corked up tight, and placed in the cellar, where they should remain for about a week; then wet a flannel rag with the liquid, and apply it to the parts affected.

3. Procure one pint of good alcohol; add one pint of water; make it sharp by adding red pepper pods of any kind, broken in small pieces. In twenty-four hours it will be fit for use. Bathe the affected parts well and frequently, warming it in by the stove, the action of the heat being of great benefit.

4. When the joints are stiffened with rheumatism or a settled cold,

the following applications are said to be capital, and enable the sufferer to move with ease: Cut into small bits, or grate it, one ounce of castile soap; add a heaping tablespoonful of red cayenne pepper. Have these in a small pitcher and then pour on to them half a pint of boiling hot water. Stir until all is dissolved, and add a little cider-brandy or alcohol when bottling. An application of the above brings the blood in a glow to the joints, and on rubbing a little sweet oil to relax the muscles, the patient will be enabled to walk with perfect ease.

5. For inflammatory rheumatism, take half an ounce of pulverized saltpeter put in half a pint of sweet oil; bathe the parts affected, and a sound cure will speedily be effected.

Rheumatic Treatment.—Dr. Ebrards, of Nimes, states that he has for many years treated all his cases of sciatica and neuralgic pains with an improvised apparatus consisting merely of a flat-iron and vinegar, two things that will be found in every house. The iron is heated until sufficiently hot to vaporize the vinegar, and is then covered with some woolen fabric, which is moistened with vinegar, and the apparatus is applied at once to the painful spot. The application may be repeated two or three times a day. Dr. Ebrard states that, as a rule, the pain disappears in twenty-four hours, and recovery ensues at once.

Rhubarb—to can.—Those who are fond of rhubarb are reminded that it can be canned for winter use in the same manner as fruits. In canning, the rhubarb is stewed as if for the table. Sugar may be added or not; it is not necessary for its preservation, but many think it is more convenient to add it at once, otherwise the rhubarb has to be heated before it is used, in order to properly incorporate the sugar. The hot rhubarb is filled into the jars in the same manner as stewed fruits, and the covers put on at once. Before placing away, try if it is possible to screw down the corks still tighter. In gathering rhubarb, select the newer stalks, as the outer and older ones are apt to be tough.

Rhubarb Culture.—If a new bed of rhubarb is needed, having spaded into the soil an abundance of manure, take up the old roots and divide them in such a manner as to leave a bud attached to each piece set out. On large plantations, seedling plants are preferred and a supply provided. Cover old beds with a heavy dressing of manure. If it is desired to force rhubarb for use in late winter or early spring, take up some large roots and place them under the stage of the green-house, or in a warm cellar, covering them with earth.

Rhubarb—sweet tincture.—Take of rhubarb, bruised, two ounces; licorice-root, bruised, two ounces; aniseed, bruised, one ounce; sugar, one ounce; diluted alcohol, two pints. Macerate for fourteen days, express and filter.

Rhubarb—compound tincture of.—Take of rhubarb, sliced, two ounce; licorice-root, bruised, one-half ounce; ginger, powdered, saffron, each two drams; distilled water, one pint; proof spirits of wine,

twelve ounces by measure. Digest for fourteen days, and strain. Dose, half ounce as an aperient; or one ounce in violent diarrhœa.

Rhubarb—to force.—Outside of places where there are professional gardeners, the forcing of vegetables is very little known in this country. People in general are content with "things in their season," and do not trouble themselves to force or retard. Perhaps the easiest vegetable to force is rhubarb; and by taking a little trouble, material for pies and sauce may be had some weeks in advance of the supply from the open ground. The things needed are clumps of rhubarb roots, soil, and a dark, warm place. The roots should be dug before the ground freezes, but in most places there is usually an "open spell" when it may be done. As fine rhubarb as we ever saw was forced in a barrel or cask; the roots packed in on a layer of soil and surrounded by it, the cask covered tight, and set near the furnace in the cellar. A box to hold the roots, and set in a cupboard or closet in the kitchen will answer; or a box or barrel may be placed in the kitchen. Keep moderately warm, and see that the roots are sufficiently moist. A few roots will give an astonishingly abundant supply, much more tender and crisp and less violently sour than the out-door crop.

Rhubarb—to cook.—Rhubarb being about the first green thing obtainable in the spring, but not being much to the tase of the majority of people, we give the following: I wonder if every one knows how much better rhubarb pies are if, after peeling and cutting up ready for the pie, you pour boiling water over it and let it stand five or ten minutes, then drain off all the water and make the pies as usual? If the edge of the under crust of rhubarb or berry pies be wet a little before the top crust is put on, the juice will not be so apt to boil out while the pie is baking. I sometimes make rhubarb pies with one crust, like a lemon pie. To a teacupful of stewed rhubarb add sugar enough to sweeten to taste, a tablespoonful of flour, a tablespoonful of melted butter, the yolks of two eggs, well beaten, and a teaspoonful of lemon extract. Bake this in one crust. While the pie is baking, beat the whites of two eggs to a stiff froth, add one tablespoonful of powdered sugar, and after the pie is done, spread this over the pie and return it to the oven long enough to brown slightly. To stew rhubarb for sauce, make a rich syrup with sugar and a little water. After carefully removing all the skin, cut the stalks into pieces about an inch long, pour boiling water over it the same as if for pies; then put it into the hot syrup, let it boil about five minutes, or until cooked, but do not stir. In this way the pieces will be whole, and the sauce will look much nicer than if stirred. It is nice for winter use prepared in this way and canned the same as fruit.

Ribbons—to clean.—Take one tablespoonful of brandy, one of soft-soap, and one of molasses. Mix thoroughly together; place the ribbon upon a smooth board, and apply the mixture with a soft brush; after which rinse in cold water, then roll up in a cloth until nearly dry; iron with a flat-iron, not too hot.

Ribbons (Old)—to renew.—Wash in cool suds made of fine soap, and iron when damp. Cover the ribbon with a clean cloth, and pass the iron over that.

Rice—how to cook.—Rice is becoming a much more popular article of food than heretofore. It is frequently substituted for potatoes at the chief meal of the day, being more nutritious and much more readily digested. In preparing it only just enough cold water should be poured on to prevent the rice from burning at the bottom of the pot, which should have a close-fitting cover, and with a moderate fire the rice is steamed rather than boiled until it is nearly done; then the cover is taken off, the surplus steam and moisture allowed to escape, and the rice turns out a mass of snow-white kernels, each separate from the other, and as much superior to the usual soggy mass, as a fine mealy potato is superior to the water-soaked article.

Rickets and Scrofula.—If children have either of these, or both these diseases, a good, nutritive diet is a great essential. Then the alkaline-bath, a little lime-water, say a teaspoonful three times a day, and out-door exercise are the chief remedies.

Rick-rack—to make.—Get pointed linen braid, and use either linen thread or coarse cotton. Button-hole a stitch into eight of the points and draw it carefully into a circle, and then go around again, putting the needle under ever thread; draw it into a wheel, and reverse the work for the other side. When you get the first two done, arrange so that it will form insertion, and then attach two points together, and proceed as before.

Ringbone—cures for.—1. Pulverized cantharides, oils of spike, origanum, amber, cedar, Barbadoes tar, and British oil, of each two ounces; oil of wormwood, one ounce; spirits of turpentine, four ounces; common potash, one-half ounce; nitric acid, six ounces; sulphuric acid, four ounces; lard, three pounds. Melt the lard, and slowly add the acids; stir well, and add the other articles, stirring till cold; clip off the hair, and apply by ruboing and heating in. In about three days, or when it is done running, wash off with soap-suds, and apply again. In old cases it may take three or four weeks; but, in recent cases, two or three applications have cured.

2. Pulverized cantharides, oils of origanum and amber, and spirits turpentine, of each one ounce; olive oil, one-half ounce; sulphuric acid, three drams; put all, except the acid, into alcohol; stir the mixture, add the acid slowly, and continue to stir till the mixture ceases to smoke; then bottle for use. Apply to ringbone or spavin with a sponge tied on the end of a stick, as long as it is absorbed into the parts.

Ringworm—remedy for.—When the disease does not come from direct contagion, children are generally in a poor state of blood, and good living, sea air, and tonic medicines are of great benefit. The following application will frequently be found of much service: Wash the part effected with a little lemon juice; then rub in with the

finger a little gunpowder which has been bruised in a mortar. Do this gently about twice a day. Be very careful not to make the skin sore.

Ring (Gold)—to remove form the finger.—The most simple and easy method to remove a gold ring which is too tight for the finger, is to rub it in one spot with a little quicksilver. It will soon break in this spot with a little pressure.

Roaches (Red)—To exterminate.—Take flour of sulphur, half a pound; potash, four ounces. Melt in an earthen pan over the fire; pulverize, and make a strong solution in water, and sprinkle the places which they frequent.

Roofing—excellent and cheap.—Have your roof stiff; rafters made of stuff one and one-half by eight inches, well supported and six feet apart, with ribs one by two inches, set edgewise, well nailed to the rafters, about eighteen inches apart. The boards may be thin but must be well seasoned, and nailed close together; this done, lay down and cover the roof with thin, soft, spongy straw paper used in making paper-boxes, which comes in rolls, and comes very low. Lay in courses up and down the roof, and lap over, nailing down with common No. 6 tacks, with leather under the heads like carpet tacks. Then spread on several coatings of the following composition, previously boiled, stirred, and mixed together: Good clean tar, eight gallons; Roman cement, two gallons (or in its place very fine clean sand may be used); resin, five pounds; tallow, three pounds; apply hot; and let a hand follow, and sift on sharp grit sand, pressing it into the tar composition. If wished fire-proof, go over the above with the following preparation: Slake stone lime under cover with hot water till it falls into a fine powder; sift, and mix six quarts of this with one quart of salt; add two gallons of water; boil and skim. To five gallons of this add one pound of alum, and one and one-half pounds of copperas, slowly while boiling, one and one-half pounds potash and four quarts of clean, sharp sand, and any color desired. Apply a thick coat with a brush, and you have a roof which no fire can injure from the outside.

Roofs—fire-proof wash for.—Slake lime in a close box to prevent the escape of steam, and when slaked pass it through a sieve. To every six quarts of this lime add one quart of rock salt and one gallon of water. After this boil and skim clean. To every five gallons of this add, by slow degrees, three-quarters of a pound of potash and four quarts of fine sand. Coloring matter may be added if desired. Apply with a paint or whitewash brush. This wash looks as well as paint, and is almost as durable as slate. It will stop small leaks in a roof, prevent the moss from growing over it, and render it incombustible from sparks falling on it. When applied to brick work, it renders the brick utterly impervious to rain; it endures as long as paint, and the expense is a mere trifle.

Roofing—for outhouses.—Let tar be boiled in an iron pot; get charcoal finely powdered, and mix it with the tar by constantly stir-

ring it till the whole is reduced to the state of mortar; then spread it upon a boarded covering with a broad wooden trowel to the thickness of one-fourth or fifth of an inch, and it will become hard and durable. Neither the heat nor cold of this climate will affect it. It is with this composition that the peasants of Sweden cover their houses.

Room—how to dust.—There are two ways of dusting a room. One is to take a feather brush, and, by briskly whisking off the polished surfaces of wood or marble, disperse into the breathing air the entire quantity of dust particles there accumulated. The other is to carefully wipe with a cotten or silken duster or chamois skin the needful articles, and then shake out the cloth either into the open air or into a fire-place in use, where the draught of air would carry the dust up the chimney. It is very hard work in a house where there is furnace heat or soft coal fires to keep the furniture dusted. An old silk handkerchief makes a good duster.

Ropes (New)—to soften.—To make a new rope as limber and soft as an old one, boil it two hours in water, and then thoroughly dry it in a warm room.

Ropes—to test the strength of.—To find what size rope you require, when roven as a tackle, to lift a given weight: Divide the weight to be raised by the number of parts at the movable block, to obtain the strain on a single part; add one-third of this for the increased strain brought by friction, and reeve the rope of corresponding strength. One-sixth of forty tons is six and two-third tons, which, with one-third added, is nine tons nearly, for which you should reeve a six inch or six and a half inch rope.

Conversely—To find what weight a given rope will lift when rove as a tackle: Multiply the weight that the rope is capable of suspending by the number of parts at the movable block, and subtract one-fourth of this for resistance.

Thus—8.9 tons, the strength of the rope, multiplied by six, the number of parts at the movable block, minus 13.3, or one-fourth, gives 40.1 tons as the weight required.

Wire rope is more than twice the strength of hemp rope of the same circumference. Splicing a rope is supposed to weaken it one-eighth.

The strongest description of hemp rope is untarred, white, three-stranded rope; and the next in the scale of strength is the common three-strand, hawser-laid rope, tarred.

Root Beer (Ottawa).—Take one ounce each of sassafras, allspice, yellow-dock, and wintergreen; half an ounce each wild cherry bark and coriander; one-fourth ounce hops, and three quarts molasses. Pour sufficient boiling water on the ingredients and let them stand twenty-four hours; filter the liquor, and add half a pint of yeast, and it is ready for use in twenty-four hours.

Rose Culture—SITUATION.—A place apart from other flowers should be assigned to them, if possible, sheltered from high winds, but open and not surrounded by trees, as closeness is very apt to

generate mildew; where they cannot have a place to themselves, any part of the garden best fulfilling these conditions will answer.

SOIL.—A most important item in their successful culture. That in which they especially delight is a rich unctious loam, that feels greasy when pressed between the fingers. Where this is not to be had the soil must be improved; if light, by the addition of loam, or even clay, well worked in; where heavy, good drainage and the addition of coal ashes in small quantities will help it, but in such places draining is most important.

PLANTING.—Mix some loam and well rotted manure together, open a good sized hole, and fill it with fresh soil; plant firmly. Shorten any very long shoots, and, if exposed to winds, secure the plant by short stakes.

MANURING.—Roses are strong feeders, and will take almost any amount of manure; pig manure is the best, except in hot soils, when cow manure is preferable; stable manure is generally available and good. Exhibitors generally apply a top-dressing in spring, but it does not improve the appearance of the beds; a good top dressing may be laid on the beds in autumn, and be dug in in the spring.

WATERING.—When coming into bloom, if the weather be dry, give a good drenching twice or three times a week; continue after blooming to prevent mildew. If greater size be required, liquid manure may be used. Syringe daily for green fly.

PRUNING.—This may be done any time after the beginning of March, according to the season. Cut out all wood over two years old and all weakly shoots. Weak growing kinds should be pruned hard—that is, down to three or four eyes; stronger growing kinds may be left longer. Cut to an eye that points outward, so as to keep the inside of the plant open. Teas and noisettes require less cutting back; the tops should be shortened and the weak shoots cut out, and they should not be pruned until May. Use a sharp knife.

Rose Water—how to make.—Whoever possesses plenty of roses can make this perfume at a slight expense. Gather the roses while free from dew, and put them into a two-gallon glass jar. Then take a two-ounce bottle and put in the mouth of the jar, so that it will fit closely, and cut some pieces of perfectly clean sponge (that has been boiled to free it from sand and grit) into narrow strips, and soak them in the purest olive or Lucca oil. Cottonseed oil will do, if free from any odor. The oil must be perfectly sweet and fresh, or it will spoil the perfume. Place the sponge inside the phial, and turn it upside down in the mouth of the jar, and put it in the hottest sunshine for four or five days. The heat will distil the rose leaves, and the aroma will rise and saturate the oil in the sponge. Throw away the leaves when they are dry, and fill the jar again with fresh rose leaves. Do this as long as the roses last, and when the bits of sponge are thoroughly saturated, squeeze out the oil, or you can leave them in the phial and keep it closely corked. A drop or two of this oil will perfume several ounces of alcohol.

Rose-bush—to layer.—A rose-bush may be layered with little trouble, and it will be found an interesting recreation to increase one's plants of desirable varieties in this manner; skill will be acquired by experience, and in a short time every attempt will result successfully. Make a narrow trench three or four inches deep where a good well-grown shoot can be bent into it. After blooming, in June, cut a slit in the shoot selected at the point where it will touch the soil, press some soil into the cut, bend the cane down to the bottom of the trench and fasten it there with some pegs, and cover it well with soil. By fall it will be a rooted plant and can be cut away and transplanted.

Rose Insects—to destroy.—There are a number of insects that trouble the rose, and at one time they were so destructive in this country in some localities that the culture of the rose was almost abandoned. The rose slug is the most common of these, and feeds upon the leaves just as the buds begin to develop. They are mostly found on the under side of the leaf, and their appearance is known by the leaves becoming brown, as if scorched or burned. It is said that an ounce of prevention is worth a pound of cure, and if this is so it would be economy to syringe the plants thoroughly with whale oil soap-suds, made by using a pound of soap to eight gallons of water before the insects appear. Commence this as soon as the leaves develop in the spring, and continue to apply it two or three times a week till the buds begin to open, after which its use will rarely be found necessary. If roses are neglected till the slugs are numerous, dust the foliage effectually in the morning while the dew is on, with white hellebore. There is another insect known as the rose bug or beetle, which is particularly destructive to greenhouse roses. It is most troublesome while in the larvæ state, when it works upon the roots, though the mature bug feeds upon the leaves. As yet, there has been no remedy found for this pest, except to hunt them and destroy them by hand. It is fortunate for the amateur florist, however, that this insect is confined chiefly to the rose house or greenhouse, and does not materially affect the outdoor growth of roses.

Rose Leaves.—Rose leaves are astringent and tonic.

They are used internally in spitting of blood, hemorrhage from the stomach, intestines, etc., as a gargle for sore throat, and for the night sweats of consumption.

The infusion is frequently used as a tonic with diluted sulphuric acid (oil of vitriol), after low fevers.

Dose of infusion, from two to four ounces.

Rose Trees—to clear from blight.—Take sulphur and tobacco dust in equal quantities, and strew it over the trees of a morning when the dew is on them. The insects will disappear in a few days. The trees should then be syringed with a decoction of elder leaves.

Rose Water—(Metropolitan).—Take two pounds of rose leaves, place them on a napkin, tied round the edges of a basin, filled with hot water, and put in a dish of cold water upon the leaves; keep the bottom water hot, and change the water at the top as soon as it be-

gins to grow warm. By this kind of distillation you will extract a great quantity of the essential oil of roses by a process which cannot be expensive, and will prove very beneficial.

Rot in Sheep—to cure.—Mix four ounces of the best honey, two ounces of burnt alum reduced to powder, and one-half a pound of Armenian bole, with as much train or fish oil as will convert these ingredients into the consistency of a salve. The honey must first be stirred in; afterward the alum and train oil are to be added.

Rouge (Turkish).—Take half a pint of alcohol and one ounce of alkanet; macerate ten days and pour off the liquid, which should be bottled. This is the simplest and one of the best articles of the kind.

CAUTION.—White lead, and all cosmetic powders containing it should never be applied to the skin, as it is the most dangerous article that could be used.

Rouge (Vinegar).—Cochineal, three drams; carmine lake, three drams; alcohol, six drams; mix, and then put into one pint of vinegar, perfumed with lavender; let it stand a fortnight, then strain for use.

Royal Pop.—Cream tartar, one pound; ginger, one and one-half ounces; white sugar, seven pounds; essence of lemon, one dram; water, six gallons; yeast, one pint. Tie the corks down.

Rubber Boots—to mend.—Dissolve small pieces of rubber, not vulcanized, in warm spirits of turpentine, to the consistency of thin molasses. Rub the patch and the boot thoroughly with sharp sandpaper. Smear both with liquid rubber five times, letting them dry each time. At the sixth application apply the patch with strong pressure to the boot, and it is mended. Liquid rubber is obtainable at city drug stores.

Rubber—to deodorize.—Cover the articles of rubber with charcoal dust, place them in an enclosed vessel, and raise the temperature to ninety-four degrees Fahrenheit, and let it remain thus for several hours. Remove and clean the articles from the charcoal dust, and they will be found free from all odor.

Rubber Hose—to repair.—Cut the hose apart where it is defective; obtain from any gasfitter a piece of iron pipe two or three inches long, twist the hose over it until the end meets, wrap with strong twine, well waxed, and it will last a long time.

Rubber—to fasten to wood and metal.—As rubber plates and rings are nowadays used almost exclusively for making connections between steam and other pipes and apparatus, much annoyance is often experienced by the impossibility or imperfection of an air-tight connection. This is obviated entirely by employing a cement which fastens alike well to the rubber and to the metal or wood. Such cement is prepared by a solution of shellac in ammonia. This is best made by soaking pulverized gum shellac in ten times its weight of strong ammonia, when a slimy mass is obtained, which in three or four weeks will become liquid without the use of hot water. This

softens the rubber, and becomes, after volatilization of the ammonia, hard and impermeable to gases and fluids.

Rubber Hand-stamps—to make.—Set up the desired name and address in common type, oil the type and place a guard about one-half an inch high around the form; now mix plaster of Paris to the proper consistency, pour in and allow it to set. Have your vulcanized rubber all ready, as made in long strips three inches wide, and one-eighth of an inch thick, cut off the size of the intended stamp, remove the plaster cast from the type, and place both the cast and the rubber in a screw press, applying sufficient heat to thoroughly soften the rubber, then turn down the screw hard, and let it remain until the rubber receives the exact impression of the cast and becomes cold, when it is removed, neatly trimmed with a sharp knife and cemented to the handle ready for use.

Rubber Rings—to restore elasticity.—The rubber ring used in the sealing of preserve jars usually become hard and worthless, and cannot be serviceable again. The cost of a rubber ring is very small, but may not be present when wanted. The elasticity of rubber rings may be restored by placing them in water and ammonia, two-thirds latter and one-third former, and allowing them to remain half an hour.

Rubbers—to repair.—Rubber, or even leather boots, may be repaired, using the following cement: Take gum shellac, three parts; India rubber, one part, by weight. Dissolve these ingredients in separate vessels, in ether free from alcohol, applying a gentle heat. When thoroughly dissolved, mix the two solutions, and keep in a bottle tightly stopped. The glue resists the action of the water, both hot and cold, and most of the acids and alkalies. Pieces of wood, leather, or other substances, joined together by it, will part at any other point than at the joint thus made. If the glue be thinned by the admixture of ether, and applied as a varnish to leather, it renders the joint of the seam water-tight, and almost impossible to separate. By cementing a piece of thin leather or rubber over a crack, a neat and durable patch may be made. The soles of leather boots may be made more durable and perfectly water-proof by soaking them thoroughly before a fire with pine tar. Three or four repeated applications are necessary to saturate the leather when it completely absorbs the tar, and the soles are dry and hard as horn, but quite flexible.

Rugs—to make.—Very pretty, durable bedroom rugs can be made from coarse but tightly-woven material, such as is used in coffee sacks. They may be lined with the same or other heavy, coarse material. Briar-stitch them around the edges with bright colors of coarse woolen yarn, and make a circle in the center of the same, or some other simple design of fancy work. We use old guano and phosphate sacks. They are made of the strongest and best material, very thickly woven. To remove the offensive odor, hang the sacks out in one or two hard rains. Soak them afterward in hot suds, and

hang them up and expose them to the air and sun a day or two. Then wash them thoroughly and they are ready for use. These rugs are quickly made, easily washed, neat in appearance, and save much wear of carpets.

Rules for the Young.—Shut every door after you and without slamming it.

Never shout, run or jump in the house.

Never call to persons up stairs or in the next room; if you wish to speak to them, go quietly where they are.

Always speak kindly and politely to servants, if you would have them do the same to you.

When you are told to do or not to do a thing by either parent, never ask why you should or should not do it.

Tell of your own faults and misdoings; not of those of your brothers and sisters.

Carefully clean the mud or snow off your boots before entering the house.

Be prompt at every meal hour.

Never sit down at the table or in the parlor with dirty hands or tumbled hair.

Never interrupt any conversation, but wait patiently your turn to speak.

Never reserve your good manners for company, but be equally polite at home and abroad.

Let your first, last and best friend be your mother.

Rum Shrub.—Tartaric acid, five pounds; pale sugar, one hundred pounds; oil lemon, four drams; oil orange, five drams. Put them into a large cask (eighty gallons) and add ten gallons water. Rummage till the acid and sugar are dissolved, then add rum (proof) twenty gallons; water to make up fifty-five gallons in all; coloring, one quart or more. Fine with twelve eggs. The addition of twelve sliced oranges will improve the flavor.

Rupture—treatment of.—An irregular swelling of any kind in the lower part of the abdomen may possibly be a rupture. If so, there will be pain, constipation, and often vomiting. Give no purgative medicine, but send at once for a physician, for the sooner the rupture is reduced the better for the patient.

Rusk—to make.—Rusk was the old farm name for what is a palatable preparation of stale and dry bread. Save all pieces of dry bread, loaves too dry to be longer palatable, crusts, etc. Put all together, first carefully sorting any moldy bits, and any burned crusts. Bake or dry thoroughly in an oven until well browned—not dark brown or coal blackened; a dark buff-brown is best. This will keep a good while. When wanted for use, crush finely with a rolling-pin or otherwise. To be eaten in milk, of which it will absorb a large quantity. It is not only a nourishing dish, but makes a good disposition of much dry and stale bread that would otherwise be wasted.

Rusty Plow—to clean.—Take a quart of water and pour slowly

into it half a pint of sulphuric acid. The mixture will become quite warm from chemical action, and this is the reason why the acid should be poured slowly into the water, rather than the water into the acid, and let it remain on the iron till it evaporates. Then wash it again. The object is to give the acid time to dissolve the rust. Then wash with water, and you will see where the worst spots are. Apply some more acid, and rub on those spots with a brick. The acid and the scouring will remove most of the rust. Then wash the moldboard thoroughly with water to remove all the acid, and rub it dry. Brush it over with petroleum, or other oil, and let it be till needed for use. When you go to plowing, take a bottle of the acid-water to the field with you, and apply it every bout to any spot of rust that may remain. The acid and the scouring of the earth will soon make it perfectly bright and smooth. If all iron work be washed over with petroleum as soon as we put our tools, implements, and machines aside for the winter, it will keep them from rusting.

Rust Preventive.—To preserve bright grates or fire-irons from rust, make a strong paste of fresh lime and water, and with a fine brush smear it as thickly as possible all over the polished surface requiring preservation. By this simple means all the grates and fire-irons in an empty house may be kept for months free from harm without further care or attention.

Rust—to preserve cast-iron from.—The *Mechanic* says cast-iron may be best preserved from rust "by heating it till, if touched with flax, it causes it to frizzle," and then plunging into a vat of mixed oil and grease. It is said that "The oleaginous matter actually penetrates the pores and prevents oxidation for a very long time, while it does not prevent painting, if desirable, afterward."

Rust—to remove from polished iron.—The best method of removing rust from a polished grate, is to scrape down to a fine powder some bath-brick, put it into a little oil, and rub the spots well with a piece of flannel dipped in the mixture; after which apply some whiting, also well rubbed in. This process must be repeated daily until all trace of the rust has disappeared. To prevent the grate or fire-irons from becoming spotted with rust, it is a good plan to rub them over with the fat from the inside of a fowl, and finish them off with whiting.

Rust—several ways to remove.—1. Iron or steel immersed in a solution of carbonate of potash or soda for a few minutes will not rust for years, not even when exposed to a damp atmosphere.

2. If you immerse the articles in kerosene oil and let them remain for some time, the rust will become so much loosened as to come off very easy.

3. Cover the steel with sweet oil well rubbed on. In forty-eight hours rub with finely powdered unslaked lime, until the rust disappears.

4. For cleaning purposes, etc., kerosene oil or benzine are probably the best things known. When articles have become pitted by

rust, however, these can, of course, only be removed by mechanical means, such as scouring with fine powder, or flour of emery and oil, or with very fine emery paper. To prevent steel from rusting, rub it with a mixture of lime and oil, or with mercurial ointment, either of which will be found valuable.

5. Melt with a pound of fresh lard three ounces of resin, and cover iron and steel utensils with this mixture, and they cannot oxidize.

6. Kerosene applied by means of a moistened cloth to stoves will effectually keep them from rusting during the summer. It is also an excellent material to apply to all iron utensils used about the farm. Give plows, cultivators and the like a coating before they are put away in the fall.

Rye Drops.—Rye drops fried are nice for breakfast. One cup of sour milk or buttermilk, three tablespoonfuls of sugar; if buttermilk is not used, put one tablespoonful of melted butter in with the sour milk, one well beaten egg, one tablespoonful of soda—not a heaping spoonful, either—and one of cinnamon. Make a stiff batter by the addition of rye flour. This is to be dropped by large spoonfuls into burning lard. If the spoon is first dipped in the hot fat, the batter will not "string" from the spoon, but will drop all at once, and make the cakes the wished for shape. They should be served while warm.

Salads—hints on.—Salad is a name given to raw herbs for food. They are among the more delicate, and, so to speak, refined sorts of vegetables that are brought upon the table. They are pleasing to the eye, as well as palatable to the taste and congenial to the stomach, if eaten in moderation. For side dishes they are invaluable, arranged with taste and suitably garnished. The most prominent salads are lettuce, celery, dandelion, mustard, endive and cress. Their component parts are fiber, water, opium, soda, etc. With civilized nations they have always been a favorite. The old Romans used to eat them cut up and served with vinegar, oil and honey. But among modern nations the French and Germans take the lead in the preparations of this most inexpensive and appetizing dish. Salads are almost numberless in the variety and diversity of their preparations. Lettuce, when dressed alone, must be young and tender, and just from the garden. Pick it over leaf by leaf, to see that no slugs are fattening upon it, and that it is free from sand and grit; but do not wash it, if possible. Place it in a salad-bowl or dish in the natural shape as nearly as possible; garnish it with a hard boiled egg, cut in rings, and serve with a carved wooden knife and fork, which comes for the purpose. It may be eaten with vinegar, oil, salt, pepper, and a little sugar, and dressed by each person taking it, or the dressing may be prepared before sending to the table in this way.

Salad—how to dress.—Take one-half a lemon and rub the inside of the salad-bowl. Rub the yolks of two hard-boiled eggs, mashing them with a wooden spoon smooth; mix with them a tablespoon of water and two tablespoons of sweet oil. Add by slow degrees a

saltspoon of salt, a teaspoonful of mustard and a teaspoonful of powdered sugar. When these are all blended evenly pour in three tablespoonfuls of vinegar. Have your lettuce quite fresh and crisp, and picked over nicely; place in the salad-bowl; do not stir it around, as that would cause it to wilt. Decorate the top of it with boiled red beet, cut in different forms, and the hard-boiled whites of your eggs.

Salad (Chicken).—The fowls for this purpose must be young and tender. Boil them; remove all the fat and skin, and disjoint them cut the meat from the bones in about half-inch squares. Take two heads of well bleached celery, wash it, and cut it up in inch pieces; mix the chicken and celery together in the salad-bowl, and cover it with a Mayonnaise sauce, which is made as follows: Two eggs, wine glassful of best olive oil, tablespoonful of best cider vinegar, half teaspoon of pepper, half teaspoonful of salt, half teaspoonful of mustard. Take the yolks of the eggs only; stir them slowly with a silver fork, adding the oil, drop by drop; then add the mustard; next the vinegar and pepper, and stir well. Last of all, add the salt, when the sauce will thicken.

Salad (Chicken).—Cut fine four or five heads of fine white bunch celery, place in a glass or white china dish. Mince all the white meat of a boiled or stewed foul, without the skin, and put with the celery. Rub the yolks of two hard-boiled eggs to a smooth paste, with a dessert spoonful of melted butter; add to it two teaspoonfuls of made mustard, and a small teaspoon of white sugar, and put to it, gradually stirring it in, a large cup of strong vinegar. Do not pour the dressing over the chicken until ready to serve, or it will discolor the celery. White heart lettuce may be used, instead of celery.

Salad (Cabbage).—One pint of good vinegar, four well-beaten eggs, half a cup of butter; put them on the fire, and stir constantly until the mixture begins to thicken; then add a tablespoonful of made mustard, two of salt, and one of black pepper; chop one head of cabbage very fine, with one bunch of celery, and soak in salt and water for two hours; drain and pour the dressing over it, and mix it. It will keep all winter in a cool place, if kept well covered. By mixing lobster or chicken with it, you will have a nice salad.

Salad (Carrot).—Wash and scrape tender, rich-colored carrots; throw them into fast-boiling water, and boil until soft; cut them into very thin slices; put them into a glass bowl, and sprinkle with sifted loaf sugar; add the juice of a large lemon, and a wineglassful of olive oil; garnish the dish with very thin slices of lemon, and any kind of green salad leaves.

Salad (Fish).—Take a pound of cold boiled fish, halibut or cod; cut it into small pieces; then make a dressing as follows: The yolks of four boiled eggs rubbed to a smooth paste with salad oil; add to this salt and pepper, mustard, two tablespoonfuls of white sugar, and lastly, six tablespoonfuls of vinegar. Beat the mixture until light, and just before pouring over the fish stir in lightly the frothed white of a

raw egg; serve the fish in a salad-bowl, with lettuce leaves around the edges, half the sauce thrown over the top, and half mixed in the fish.

Salad (German).—Take six medium sized cold potatoes, and slice thin, three good-sized sweet apples, also cut in small slices, four silver-skinned onions chopped fine, and a little parsley cut in bits; dress these with two tablespoonfuls of oil, salt, pepper, sugar, and a little mustard and vinegar to blend the whole; beat it very light, and stir through the salad; garnish with hard-boiled eggs cut in rings.

Salad of Game.—Boil eight eggs hard; throw into cold water; take the shells off, and cut them into four pieces, lengthwise; make a very thin, flat border of butter about an inch from the edge of the dish you are going to serve them on; fix the pieces of egg upright, close to each other, the yolk outside, lay inside a layer of any fresh salad that may be in season, and lay your game, cut in eight pieces, in the middle; put a spoonful of eschalots, finely chopped, in a basin, one spoonful of sugar, the yolk of one egg, a teaspoonful of chopped parsley, a quarter of a spoonful of salt; mix in, by degrees, with a wooden spoon, four spoonfuls of salad oil, and two of vinegar; when it is all mixed, put it on the ice until you wish to use it; when it is ready to serve up, whip a gill of cream rather thick, which lightly mix with it; lay the inferior pieces of game in the center of the dish, and put some sauce over each piece; then lay over it some salad and the remainder of the bird, putting more sauce over it. The eggs may be ornamented with pieces of beet-root, and gherkins cut in diamonds may be placed between them.

Salad (Lobster).—1. Take two heads of lettuce, and place a layer of the leaves around your salad-bowl, and in the middle of it pile your lobster, picked in small pieces, reserving the claws. Mash fine the yolks of three hard-boiled eggs with salt, cayenne pepper, mustard, and white sugar, half a teaspoonful of each, adding gradually two tablespoonfuls of fine olive oil, and three of vinegar; simmer this dressing over the fire, but do not let it boil; pour it over the lobster, and fill the space around it with the remainder of the lettuce; place on the lobster stars of pickled cucumber, and olives cut in halves, lengthwise, and the stones taken out; and in the lettuce the whites of eggs, cut in rings and forming a chain.

2. Take inside of large lobster, mince fine, take the yolks of two eggs boiled hard and mashed fine, with four tablespoonfuls of sweet oil; pepper, salt, vinegar and mustard to taste; mix well; add celery or lettuce to taste; then when serving, garnish with hard-boiled eggs.

Salad (Orange).—1. Take one dozen oranges, peel and cut in slices, lay a layer of them in a glass dish, sprinkle over each layer, so as to cover, prepared cocoanut, and squeeze the juice of three oranges on top.

2. Cut up several oranges crosswise into slices an eighth of an inch thick; place them on a flat glass dish, one piece half covering the other until the dish is covered; sift powdered sugar over them, and a third of a wineglassful of brandy.

Salad (Peach).—Peach salad is made in the same way as orange salad, with the brandy omitted, and a wineglassful of sherry wine substituted.

Salad (Potato).—Take from six to eight medium-sized boiled potatoes, let them get cold; then slice them thin; two silver-skinned onions minced very fine, so as to get the flavor, and not detect the onions in pieces; mix the latter with parsley and the potatoes; season with salt and cayenne pepper. Take one tablespoonful of dry mustard, moisten it with a teaspoonful of hot water, put the yolks of two eggs in the same dish, beat together with an egg-beater until well mixed, then put in sweet oil, drop by drop, until it thickens like custard; add one and one-half teaspoonfuls of vinegar, put it over your potatoes, mix all together; garnish the top with small lettuce leaves or celery tops, or parsley sprigs.

Salad (Philadelphia).—Small head of cabbage cut fine, half a cupful of sweet milk, half a cupful of sugar, half a cupful of flour, quarter of a teaspoonful of mustard, half a teaspoonful of salt; mix the mustard and flour together, with just enough vinegar to wet them; then mix the other materials, except the cabbage, together quickly; put them in a porcelain-lined kettle, and stir over the fire until they come to a boil; throw it hot over the cabbage, stir it through, and cover it tight until it is cold. Celery may be cut with the cabbage; it is a great improvement.

Salad (Tomato)—One can of tomatoes, same quantity of chopped celery, three raw eggs beaten light, season with salt, and boil tomatoes and celery together until they are thick; take off fire; stir in the egg, and when nearly cold, stir in one tablespoonful of made English mustard.

Salad (Vegetable).—Boil a small cabbage until tender, let it get cold, cut it into pieces; add a chopped boiled beet, some sliced boiled potatoes, and some capers. Dress with oil, vinegar, pepper and salt.

Salmi of Duck.—From the cold ducks left after yesterday's dinner, cut all the meat in as neat slices as you can, leaving the joints of legs and wings whole. Take off the skin, break the carcass into pieces, and put these, with the stuffing, into a saucepan with a fried onion, some sweet herbs, salt, and pinch of allspice; cover with cold water and stew gently, after it reaches the boil, for one hour. Cool, that the fat may rise and be taken off. Strain the gravy when it is skimmed; return to the sauce-pan, boil and skim again, and stir in two tablespoonfuls of browned flour, wet with cold water; lastly, stir in a spoonful of butter. Stew five minutes longer, and put in the meat. Draw to one side of the range, and set, closely covered, in a pot of boiling water for ten minutes. The meat must be thoroughly heated and steeped in the gravy, but not boil. Take the meat out with a perforated spoon, pile neatly upon a dish and pour the gravy over it. Garnish with triangles of stale bread fried crisp, and send a piece to each person who is helped to salmi.

Salsify (Stewed).—Scrape the roots, dropping each into cold

water; you do this that they may not change color. Cut in pieces an inch long; cover with hot water and stew until tender. Drain off two-thirds of the water and add enough milk to cover the salsify. Stew ten minutes in this; put in a good lump of butter rolled thickly in flour. Pepper and salt. Boil up for one minute.

Salt—medicine.—1. In many a disordered stomach a teaspoonful of salt is a certain cure. 2. In the violent internal aching termed colic, add a teaspoonful of salt to a pint of cold water, drink it and go to bed; it is one of the speediest and best remedies known. 3. The same will revive a person who seems almost dead from receiving a fall, etc. 4. In an epileptic fit, no time should be lost in pouring down salt water, if sufficient sensibility remains to allow of swallowing it; if not, the head must be sponged with cold water until the senses return, when salt will completely restore the patient from his lethargy. In a fit, the feet should be placed in warm water, with mustard, and the legs briskly rubbed, all bandages removed from the neck, and a cool apartment procured, if possible. 5. In many cases of bleeding at the lungs, when other remedies fail, Dr. Rush found that two tablespoonfuls of salt completely stayed the blood. 6. For toothache, warm salt water held to the part and renewed two or three times will relieve in most cases. If the teeth be covered with tartar, wash twice a day with salt. 7. For swelled neck, wash the part with brine and drink twice a day, also, until cured. 8. Salt will expel worms, if used in food in a moderate degree, and aid digestion, but salt meat is injurious if used much.

Salt—for poultry.—Hens often have a habit of biting and pulling their feathers and greedily eating them until their bodies are bare. This practice, it is believed, is occasioned by a want of salt, as when salted food is given them they make no attempt to continue the habit. Salt pork chopped fine and fed twice a week has been adopted with success, while others put a teaspoonful of salt with two quarts of meal or shorts moistened, well mixed, and feed about twice every week. Fowls, like human beings, to be healthy must have a certain allowance of salt.

Salt Food.—The excessive use of salt food will produce salt-rheum and the canker, and also effect the hands, causing roughness and cracking. Corn huskers have need to be careful with their hands; they should do without soap as much as possible, and grease the affected parts at night with unsalted mutton fat well warmed and rubbed in.

Salve (Yankee).—For boils and sores of almost every kind it will be found of great service: Tallow, one pound; linseed oil, one pound; beeswax, one-half pound; Burgundy pitch, four ounces; Venice turpentine, four ounces; resin, one-quarter pound; oil of lavender, two ounces. Mix all together and simmer over the fire for about twenty minutes. As this makes a large quantity, one-half of the above ingredients may be taken.

Salve (Cider).—One pint of hard cider, one-quarter pound of bees-

wax, one-quarter pound of resin, and one-half pound of lard; boil the cider half away in a new earthen vessel, add the other ingredients, and boil until all are thoroughly incorporated. It will cure every kind of sore, and is good for chapped hands also.

Salve (Family).—Take the root of yellow dock and dandelion, equal parts; add good proportion of celandine and plantain. Extract the juices by steeping or pressing. Strain carefully, and simmer the liquid with sweet cream or fresh butter and mutton tallow, or sweet oil and mutton tallow. Simmer together until no appearance of the liquid remains. Before it is quite cold, put into boxes. This is one of the most soothing and healing preparations for burns, scalds, cuts, and sores of every description.

Salve (Green Mountain).—For rheumatism, burns, pains in the back or side, etc., take two pounds resin; burgundy pitch, one-fourth pound; beeswax, one-fourth pound; mutton tallow, one-fourth pound; melt slowly; when not too warm, add oil hemlock, one ounce; balsam fir, one ounce; oil of origanum, one ounce; oil of red cedar, one ounce; Venice turpentine, one ounce; oil of wormwood, one ounce; verdigris, one-half ounce. The verdigris must be finely pulverized and mixed with the oils; then add as above, and work in cold water like wax till cold enough to roll.

Salve (Green).—White pine turpentine and lard, half a pound of each; honey and beeswax, quarter of a pound each; melt all together and stir in half an ounce of very finely pulverized verdigris. This ointment cannot be surpassed when used for deep wounds. It prevents proud flesh from forming, and keeps up a healthy discharge.

Salve (Lip).—1. Put a half pound of fresh lard into a pan with an ounce and a half of white wax; set on a slow fire till it is melted; then take a small tin dish, fill it with water, and add a few chips of alkanet root; let the water boil till it becomes a beautiful red color; strain some of it, and mix it with the other ingredients according as may be desired; scent it with some agreeable and favorite extract, and then pour it into small white jars or boxes.

2. Take of white wax, one ounce; sweet oil, one ounce; spermaceti, one dram; melt all together, adding a little alkanet root to color, and while cooling, add oil of rose to perfume.

Salve (Russia).—Take equal parts of yellow wax and sweet oil; melt slowly, carefully stirring; when cooling, stir in a small quantity of glycerine. Good for all kinds of wounds, etc.

Sandwiches.—A new way to make them is to boil a few pounds of nice ham; chop very fine while yet warm, fat and lean together, with an equal quantity of lean veal boiled or roasted; rub dry mustard through the mass in proportion to suit the taste, also a pinch of cayenne pepper; a single clove or garlic chopped with the meat vastly improves it; add as much sweet butter as you would use to spread on bread sandwiches; mix well, have some nice light soda and sour milk biscuit, cold; cut in two and spread the mixture between, or use muffins, if you have them. These are very nice for a picnic or festi-

val table, and not half the work of those made in the old way, as it saves you buttering the bread, slicing the ham, and spreading the mustard, and you will find the gentlemen will eat twice the number than if made in the old way.

Sandwiches (Egg).—Take as many hard-boiled eggs as necessary; grate them; salt and pepper, put between buttered slices, and send to table.

Sangaree.—Wine, ale, or porter, or two-thirds water, hot or cold, according to the season of the year, loaf sugar to taste, with nutmeg.

Sarsaparilla (Ayer's).—Take three fluid ounces each of alcohol, fluid extracts of sarsaparilla and of stillingia; two fluid ounces each, extract of yellow dock and of podophyllin; one ounce sugar, ninety grains iodide of potassium, and ten grains iodide of iron.

Sauce (Butter).—Put two ounces of butter into a very clean saucepan, with two tablespoonfuls of water; dredge in a little flour, and shake it over a clear fire until it boils, then pour it into a tureen. Another way of making butter sauce is to put a teaspoonful of flour and a pinch of salt into a bowl, mix them gradually with a quarter of pint of cold water or milk; shake it over the fire until it has boiled for the space of two minutes, then add an ounce and a half of butter, chopped into small pieces or slices; dissolve it over the fire, shaking the saucepan continually around in the same direction till the butter is melted. Let it boil for one minute, when it will be done.

Sauce (Foam).—One cup of sugar, two-thirds cup of butter, one spoonful flour, beaten together until smooth; place over the fire, and stir in three gills of boiling water; flavor with nutmeg.

Sauce (Horseradish).—1. Horseradish sauce is preferred by some people to the plain, grated radish. Take two tablespoonfuls each of made mustard and white sugar, half a teaspoonful of salt, one gill of vinegar. Beat these together, and pour over as much grated radish as it will moisten sufficiently.

2. Grate a quantity of horseradish, boil it in sufficient water to give it the consistency of sauce, add a pinch of salt and two or three tablespoonfuls of tarragon vinegar, then stir in off the fire a gill of cream beaten up with the yolk of an egg.

Sauce (Lemon).—Half cup butter, one cup of sugar, one egg, one grated lemon, three tablespoonfuls of boiling water; put in a tin pail and set in a pan of boiling water to thicken.

Sauce (Mayonnaise).—Yolks of two eggs, one saltspoonful of salt, half do. pepper, one tablespoonful vinegar, one teaspoonful mustard. Beat well together, and add while beating a gill of oil.

Sauce (Mint.)—Two tablespoonfuls green mint, chopped fine, add to it two tablespoonfuls sugar, and half a cupful of vinegar

Sauce (Parsley).—Wash a handful of parsley, and chop it up finely with the pulp and rind of a lemon; melt an ounce of butter in a saucepan, mix with it a tablespoonful of flour, add the parsley and lemon; also add sufficient broth or stock to make the sauce, a little

powdered mace, and a few capers; stir over the fire, and when partly cooked, take off fire and add the yolks of four well-beaten eggs.

Sauce (Green Tomato).—Cut up two gallons of green tomatoes; take three gills of black mustard seed, three tablespoonfuls of dry mustard, two and a half of black pepper, one and a half of allspice, four of salt, two of celery seed, one quart each of chopped onions and sugar, and two and a half quarts of good vinegar, a little red pepper to taste. Beat the spices and boil all together until well done.

Sauces—when to sweeten.—Experience teaches us not to flavor or sweeten sauces with sugar, until they are nearly or quite cooked. By long boiling some spices and essences develop a bitter, unpleasant flavor, and we know fruit requires a third more sugar than if added to it when ready to take from the stove, owing, we read, to the saccharine properties of the sugar being converted into glucose or grape sugar, which is not so sweet.

Sausages (Bologna).—Take equal quantities bacon fat and lean beef, veal, pork, and beef suet; chop them small, season with pepper, salt, etc., with sweet herbs and sage rubbed fine. Have well washed intestines, fill, and prick them; boil gently for an hour, and lay on straw to dry.

Sausage-making.—Of course those who raise their own pork will make their own sausages; and those who are fond of sausage meat, but have to buy it, will find it greatly to their advantage to purchase meat before it is cut up, and season it for themselves. Sausages made of beef and pork are more wholesome and more hearty than those made of pork alone. About one-fourth of the meat should be fat and the three-fourths be equally divided between lean beef and pork. With a machine which costs only a few dollars, the labor of chopping the meat will be trifling and the machine will be found useful in making mince pies, hash, and salads. For the sausages, take twelve pounds of chopped meat, six ounces of salt, four ounces of sage, one ounce of black pepper, half a teaspoonful red pepper, and a teaspoonful powdered saltpeter; mix thoroughly, and put in skins or in cases of muslin, and smoke moderately. It is well to put in only a part of the seasoning and try the meat to see what additions it needs to make it right. If, instead of smoking the sausage they be fried in hot lard, after the manner of cooking doughnuts, then packed in jars and the lard poured over them, they will keep without spoiling until warm weather. Very good sausages are made of hogs' hearts, after the following recipe: Twenty pounds hogs' hearts, ten pounds fat pork, twelve ounces salt, six ounces pepper, sage to taste, other spices if you like; chop fine and put in skins.

The quality will depend largely upon the kind of meat or meats used. Cutting or grinding fine is desirable, running twice or more through the machine unless it be a better one than most of those in use. It does not pay to use "skins;" to prepare the intestines thoroughly involves much labor, and they add nothing to the substance

or flavor. For early use, press the meat into cakes with the hands, and pack the rest in earthen jars, to be made into cakes as wanted for frying. For long keeping, into summer if desired, make into suitable cakes and fry; pack in jars, and fill these with melted lard. The pieces can be taken out at any time and simply warmed through; they will be as sweet and fresh as when first prepared. Don't spoil sausage meat with spices or mint. Use salt and pepper moderately, leaving every one to apply these freely in eating, as individually desired.

Sausage—to keep.—Cook them nearly done, put them in tin cans, cover them with some kind of good grease, seal them up the same as you would any kind of fruit. They will keep any length of time.

Saws (Circular)—to repair.—The best way to do this is to drill a small round hole at the termination of the crack, which effectually prevents its further extention. I have seen some circular saws very neatly repaired by riveting thin clamps to each side of the fracture, both clamps and rivets being countersunk so they will be level with the surface of the saw, and placed in such a position across the crack as to impart the greatest possible strength to the weakest place.

Saws (Cross-cut)—to mend.—In the first place scarf off the broken edges in such a manner that they will lap over each other, heat, place it on the anvil and unite the joint as rapidly as possible with the hammer; be careful not to heat so hot as to injure the steel. When the job is well done, and the part properly tempered, it will be found as strong as the rest of the plate.

Saws (Broken)—to mend.—Pure silver, nineteen parts; pure copper one part; pure brass, two parts; all to be filed into powder and thoroughly mixed; place the saw level on the anvil, broken edges in contact and hold them so; now put a small line of the mixture along the seam, covering it with a larger bulk of powdered charcoal; now with a spirit-lamp and a jeweler's blow-pipe hold the coal-dust in place, and blow sufficient to melt the solder mixture; then with a hammer, set the joint smooth, and file away any superfluous solder, and you will be surprised at its strength; the heat will not injure the temper of the saw.

Scab (In Sheep)—ointment for.—Scab in sheep is a disease of the skin, arising from the presence of a minute insect which buries itself in the skin. The following ointment will cure if applied persistently: Lard, two pounds; oil of tar, one-half pound; sulphur, one pound. Mix the two latter ingredients gradually, then add the former, and rub down altogether. Tobacco water is also good.

Scale in Boilers—to remove.—Petroleum has recently been successfully employed for the removal and prevention of scale in steam-boilers, also for the removal of deposits from water-pipes where the water contains large quantities of lime. It has the effect of penetrating and rotting the scale, causing it to become porous and disengage itself from the surface to which it is attached. It is a very simple remedy, and can be used in small quantities without any difficulties

whatever—say about a quart every week for a twenty-five horse-power boiler, and in quantities more or less according to the size of the boilers. It may be introduced in the feed-water, or through the safety-valve, or in any way most convenient for the purpose; but to be effective, it must be pure. The heavy oil used for lubricating purposes in cold situations is the most efficient, as the refined oil of this description is of no use, as it is soon expelled by the heat.

Scalds and Burns.—The very best thing to be done when any one has received a burn or a scald, is to lay on the part that is injured a thick coating of cotton wool or wadding, so as to completely exclude the air. If the above wool happens not to be at hand, scraped potato or turnip will ease the pain.

Scarlet Fever—treatment.—An eminent physician says he cures ninety-nine out of every hundred cases of scarlet fever by giving the patient warm lemonade with gum arabic dissolved in it. A cloth wrung out in hot water and laid upon the stomach should be removed as rapidly as it becomes cool. In cases where physicians are not easily obtainable, simple remedies are not to be despised.

Scorched Lime—to bleach.—If a shirt-bosom or any other article has been scorched in ironing, lay it where bright sunshine will fall directly upon it. It will remove it entirely.

Scours in Calves.—For scours in calves, a raw egg broken into their milk is the most effectual remedy that I have ever tried. A piece of rennet soaked in milk is also good; but I prefer the raw egg.

Scouring in Horses or Cattle.—Tormentil root, powdered. Dose for a horse or cow, one to one and a half ounces. It may be stirred into one pint of milk, and given ; or it may be steeped in one and a half pints of milk, then given from three to six times daily, until cured.

Scours and Pin-Worms in Horses and Cattle.—White ash bark burned into ashes and made into a rather strong lie; then mix one-half pint of it with one pint of warm water, and give all two or three times daily. This will certainly carry off the worms, which are the cause, in most instances, of scours and looseness.

Scratches—to cure.—Scratches of all kinds are generally painful. If the wound is made by a pin a little poultice of bread and milk should be applied for an hour or so, and then salve until it is healed.

Scratches in Horses.—Cut off the hair close and wash the legs in strong soap-suds or urine, or wash with warm vinegar saturated with salt, and afterward dress over with a small quantity of hog's lard.

Scratches in Furniture—to remove.—One can remove scratches from furniture, if not too deep, by rubbing with oil or camphorated oil. Mix one teaspoonful of spirits of camphor with two of oil. Common kerosene takes out scratches, but smells unpleasantly for a little while afterward.

Scrap Basket—to make.—A pretty receptacle for scraps or waste paper may be made from a peach basket, by weaving strips of blue

silesia in and out between the slats, and then making a full lining which shall be deep enough to form a puff over the top. I made mine by weaving in strips of black and pale yellow galloon, one above and one below the band, the band itself being covered with blue silesia, and finished with a bow of the same.

Scrap Book—for pictures.—A picture scrap book, fascinating to both girls and boys, may be made as follows : Cut tinted pasteboard into leaves of convenient size. On these paste pictures of all sorts that may have accumulated in the house, such as advertising cards, wood-cuts, and the like. Punch holes through these leaves and tie together with bright ribbons. When the pictures are prettily arranged and interposed with bits of poetry, rhymes and gingles, the book will hardly fail to prove a source of entertainment.

Screws (Rusty)—to remove.—It often happens that screws and nails become so rusted into wood that it is impossible to remove them without damage; whenever this is the case, pour a little kerosene over them, and after soaking a short time the rust will give way. By the same application, nuts and bolts that have been fixed by rust for years may be made to turn. The kerosene soon penetrates the interstices.

Screw in Plaster.—It often becomes desirable to insert screws into plaster walls without attaching them to any wood-work ; but when we turn them the plaster gives way, and our effort is vain; and yet a screw may be inserted in plaster, so as to hold light pictures, etc., very firmly. Enlarge the hole to about twice the diameter of the screw, fill it with plaster of Paris, such as is used for fastening the tops of lamps, etc., and bed the screw in the soft plaster. When the plaster has set the screw will hold like iron.

Screens—to make.—A simple and easily made fire screen has, instead of the ordinary panel, a rod across the top, from which depends a full curtain of velveteen with a dado of stamped plush, studded with small spangles. For any one who has time and taste for embroidery, a strip of sateen, decorated with needlework, may take the place of the plush.

A screen to take in the hand, or put in a movable rest, is made by covering a long handled Japanese fan with black satin, on which is worked, in silver gray silk, a representation of a spider's web, which may be drawn from nature without much trouble. The web is worked on a large scale, in much the same way that ladies were fond of ornamenting buttons a few years ago—bars radiating from a center, and lines of silk going around, with a stitch taken over the bar at each intersection, to prevent the circular effect demanded for the button. The other side of the fan may be covered with plain satin, with a flat bow in the center, and the handle may be colored red or black.

For screens framed in ebony, gilded leather furnishes one of the best of materials.

Scurf in the Head—to remove.—A lump of fresh quicklime the size of a walnut dropped into a pint of water and allowed to stand all

night, the water being then poured off from the sediment and mixed with a quarter of a pint of the best vinegar, forms the best wash for scurf in the head. It is to be applied to the roots of the hair.

Screw Cutting—to make dies for.—In making dies for screw-cutting, they should, whenever practicable, be lapped with a taper tap, as they cut more easily and wear longer than those which are cut straight, and then tapered off to make the screw "take."

Very fine threaded screws, however, cut well with straight dies. Small dies, or dies below one-fourth of an inch in size, should only have three lips in them. Dies from one-fourth to one-half should have four lips in them. Dies from three-fourths to one inch should have six lips in them; and dies from one inch to one and a half should have seven lips in them. The cuts through dies should be only twice the depth of the thread, which is sufficient to make them free themselves from chips, for when cut too deep they are liable to break on the face. Harden and draw to a straw color.

Screws—to make hold.—When screws are driven into soft wood, subjected to considerable strain, they are very likely to work loose, and many times it is very difficult to make them hold. In every case we have found the use of glue profitable. Prepare the glue thick; immerse a stick about the size of the screw and drive it home as soon as possible. When there is some article of furniture to be repaired and no glue handy, insert the stick and then fill the rest of the cavity with pulverized resin, then heat the screw sufficient to melt the resin as it is driven in. Chairs, tables, lounges, etc., are continually getting out of order in every house; and the time to repair the break is when first noticed. If neglected the matter grows still worse, and finally results in the laying by of the article of furniture as worthless. Where screws are driven into the wood for temporary purposes they can be removed much easier by dipping them in oil before inserting. When buying screws, notice what you are getting; for there are poor as well as good kinds. See that the heads are sound and well cut; that there are no flaws in the body or thread part and that they have good gimlet points. A screw of one make will drive into oak as easy as others into pine, and endure having twice the force brought against it.

Sea Foam for Barbers.—Alcohol, four ounces; castor oil, one ounce; ammonia, one-half ounce; water one pint. Dissolve the castor oil and ammonia in the alcohol, then add the alcohol mixture to the water.

Sealing-wax (Red).—Shellac (very pale), four ounces; cautiously melt in a bright copper pan over a clear charcoal fire; when fused, add Venice turpentine, one and one-fourth ounces. Mix, and further add vermilion, three ounces; remove the pan from the fire, and pour into a mold. For a black color, use ivory black, or lampblack, instead of the vermilion; for a blue color, use Prussian blue, instead of vermilion, same quantity. Each color must be well mixed with the composition; of the lampblack, use only sufficient to color.

Sealing-wax (Gold Color).—Bleached shellac, three pounds; Venice turpentine, one pound; Dutch leaf ground fine, one pound, or less. The leaf should be ground, or powdered sufficiently fine, without being reduced to dust. Mix with a gentle heat, and pour into molds.

Sea-sickness—sure preventive.—Make a mild decoction of the bark of the wild cherry, about the strength of breakfast tea, and take a wineglassful before every meal for three days before going to sea; on the last day take a mild aperient.

Sea-sickness—treatment of.—Few ailments are more distressing than sea-sickness, and, unfortunately, there are very few less amenable to remedies. In our opinion, sea-sickness is more easily prevented than cured; for, when the attack has once begun, it is hardly possible to keep anything on the stomach. Those who are subject to this complaint should be careful, before they go on board, to take no food which is likely to turn acid. Dry hard biscuits and brandy and water are the best preparations for a sea voyage, and a little soda may be added to the latter with advantage; a recumbent posture as near as possible in the center of the vessel is best. Those who can take any remedy may find benefit from the following mixture: Three tablespoonfuls of camphor julep, thirty drops of ether, six drops of laudanum, twenty grains of magnesia. The dose may be repeated after four hours, if the sickness seems likely to return. The feet and hands should be kept warm.

An India-rubber bag of ice placed down the spine is a certain preventive of sea-sickness. The ice should be renewed as required. This powerful preventive should not be resorted to without medical advice.

Sea-water (Artificial).—Sea-water is so beneficial in all cases of local debility, and often so difficult to be obtained, that any good imitation of it must be considered a great boon. The following mixture possesses most of the properties of pure sea-water, and will be found an excellent substitute when it cannot be procured: One gallon of pure spring water, two ounces of common salt, one-fourth ounce of muriate of magnesia, three drams of muriate of lime, one dram of sulphate of soda, one dram of sulphate of magnesia. Stir these ingredients well together till all are melted, when the water will be fit for use.

Sea-water—to make fit for washing linen.—Soda put into sea-water makes it turbid; the lime and magnesia fall to the bottom. To make sea-water fit for washing linen at sea, as much soda must be put in it as not only to effect a complete precipitation of these earths, but to render the sea-water sufficiently laxivial or akaline. Soda should always be taken to sea for this purpose.

Sea-weeds—to collect and lay out.—First wash the sea-weed in fresh water, then take a plate or dish (the larger the better), cut your paper to the size required, place it on the plate with fresh water, and spread out the plant with a good-sized camel's-hair pencil in a natural

form (picking out with the pin gives the sea-weed an unnatural appearance, and destroys the characteristic fall of the branches, which should be carefully avoided); then gently raise the paper with the specimen out of the water, placing it in a slanting position for a few moments, so as to allow the superabundant water to run off; after which place it in the press. The press is made with either three pieces of board or pasteboard. Lay on the first board two sheets of blotting-paper; on that lay your specimens; place straight and smooth over them a piece of old muslin, fine cambric, or linen; then some more blotting-paper, and place another board on the top of that, and continue in the same way. The blotting-paper and the muslin should be carefully removed and dried every day, and then replaced; at the same time those specimens that are sufficiently dried may be taken away. Nothing now remains but to write on each the name, date and locality. You can either gum the specimens in a scrap-book, or fix them in, as drawings are often fastened, by making four slits in the page, and inserting each corner. This is by far the best plan, as it admits of their removal, without injury to the page, at any future period, if it be required either to insert better specimens, or intermediate species. Some of the large algæ will not adhere to the paper, and consequently require gumming. The following method of preserving them has been communicated to me by a botanical friend: "After well cleaning and pressing, brush the coarser kinds of algæ over with spirits of turpentine, in which two or three small lumps of gum mastic have been dissolved by shaking in a warm place; two-thirds of a small phial is the proper portion, and this will make the specimens retain a fresh appearance.

Secrets of Health.—First, keep warm; second, eat regularly and slowly; third, maintain regularly bodily habits; fourth, take early and very light suppers; fifth, keep a clean skin; sixth, get plenty of sleep at night; seventh, keep cheerful and respectable company; eighth, keep out of debt; ninth, don't set your mind on things you don't need; tenth, mind your own business; eleventh, don't set yourself up to be a sharper of any kind; twelfth, subdue curiosity; thirteenth, avoid drugs.

Seidlitz Powders.—Rochelle salts, two drams; bicarbonate soda, two scruples; put these into a blue paper, and thirty-five grains tartaric acid into a white paper. To use, put each into different tumblers, fill one-half with water, adding a little loaf sugar to the acid, then pour together and drink quick.

Seidlitz Water (Bottled). Fill soda water bottles with clear water; add to each as below; cork and wire immediately: Rochelle salts, three drops; bicarbonate of soda, thirty-five grains; sulphuric acid, eleven drops.

Self-control.—In some people passion and emotion are never checked, but are allowed to burst out in a blaze whenever they come. Others suppress them by main force, and preserve a callous exterior when there are raging fires within. Others are never excited over

anything. Some govern themselves on some subjects, but not on others. Very much can be done by culture to give the will control over the feelings.

One of the very best means of culture is the persistent withdrawing of the mind from the subject which produces the emotion and concentrating it elsewhere. The man or woman who persistently permits the mind to dwell on disagreeable themes only spites him or herself. Children, of course, have less control, and parents and teachers must help them to turn their attention from that which excites them to something else; but adults when they act like children ought to be ashamed of themselves. The value of self-control as a hygienic agent is very great. It prevents great waste of vitality in feeling, emotion and passion. It helps to give one a mastery over pain and distress, rather than it over us.

Sewer Gas—how to find out whether it enters your house.—Procure an ounce or two of essence of peppermint in a small glass phial. Pour it into the drain or water-closet which communicates most directly with the main drain, if possible into one outside the house. Then pour after it a gallon of hot water. A leakage of sewer-gas will be immediately indicated by an odor of peppermint. The phial should not be brought into the house, but be thrown out of the window or recorked and left; and, if possible, the person who pours the drug into the drain should not come into the house or rooms to be tested for some time, as the odor clings pertinaciously to the clothes, and may in this way give unnecessary alarm.

Shampoo Liquids.—1. An excellent shampoo is made of salts of tartar, white castile soap, bay rum and luke-warm water. The salts will remove all dandruff, the soap will soften the hair and clean it thoroughly, and the bay rum will prevent taking cold.

2. Mix borax, three-fourths pound, with salts tartar, one-fourth pound, and dissolve one ounce of the mixture in one pint of water.

3. Dissolve one-half ounce carbonate of ammonia and one ounce of borax in one quart of water, then add two ounces of glycerine, three quarts of New England rum, and one quart of bay rum; moisten the hair with this liquor; shampoo with the hands until a slight lather is formed, then wash off with clean water.

4. Soft water, one pint; sal soda, one ounce; cream tartar, one-fourth ounce. Apply thoroughly to the hair.

Sheep—to protect from flies.—The months of July and August are the ones when sheep in many localities are subject to a most aggravating annoyance from a fly (*oestrus bovis*) which seems bound to deposit its larvæ in the nostrils. It infects wooded districts and shady places where the sheep resort for shelter, and by its ceaseless attempts to enter the nose makes the poor creature almost frantic. If but one fly is in a flock they all become agitated and alarmed. They will assemble in groups, holding their heads close together and their noses to the ground. As they hear the buzzing of the little pest going from one to another, they will crowd their muzzles into the loose

dirt, made by their stamping, to protect themselves, and as the pest succeeds in entering the nose of a victim, it will start on a run, followed by the whole flock, to find a retreat from its enemy, throwing its head from side to side, as if in the greatest agony, while the *oestrus*, having gained his lodging place, assiduously deposits its larvæ in the inner margin of the nose. Here, added by warmth and moisture, the eggs quickly hatch into a small maggot, which, carrying out its instincts, begins to crawl up into the nose through a crooked opening in the bone. The annoyance is fearful, and maddening, as i works its way up into the head and cavities.

The best known remedy is tar, in which is mixed a small amount of crude carbolic acid. If the scent of the acid does not keep the fly away he gets entangled in the tar, which is made soft by the heat of the animal. Any kind of tar or turpentine is useful for this purpose, and greatly promotes the comfort of the sheep, and prevents the ravages of the bot in the head.

Shawl (Breakfast)—to crochet.—Make a chain corresponding in length to the desired size of the shawl around the neck. Crochet a row of double stitch on this chain, putting a stitch in each loop of the chain. Between the first and second stitches of this row attach three double stitches; between the fourth and fifth, three; between the seventh and eighth, three. Continue in the same manner until the middle of the chain is reached, where six stitches should be made. The last half of the row is to be crocheted like the first half. The work will now appear divided into clusters of three stitches each. For the next row crochet three stitches between the first and second stitches of the first cluster, three after it and every succeeding cluster, six between the two clusters that mark the middle, and three between the last two stitches of the last cluster. Each remaining row to be worked in the same manner, taking care always to work one cluster between the two stitches at each end of the row, and two clusters exactly in the middle. Widened in this way the bottom of the shawl will describe the two equal sides of the right angled triangle.

Shawl (Crape)—to clean.—Wash it in warm suds made of white soap dissolved; rub the spots gently, so as not to injure the texture; rinse in blue water and twice in clear lukewarm water, and pin it to dry.

Shawl (Shetland)—to wash.—Make a thin lather of boiled soap and water; plunge the shawl in this, and gently strip it through the hand. It must never be rubbed or wrung. When clean, rinse through water without any soap, hang it up for about a minute, shake it gently by each side alternately, pin it out on a sheet exactly square, and if the shawl be of a fine texture it should be lightly sewed down to the sheet by the top of the fringe to prevent it running up; then go over the whole fringe, drawing each thread separate, and laying it straight out. If these directions are carefully attended to the shawls may be washed many times, and each time appear as well as when new.

They should never be put into the hands of any but those who are accustomed to wash lace.

Sheep (Foot-rot in)—to cure.—Clean the foot well, and pare off all decayed parts of the hoof and frog, taking care not to draw blood. Mix equal quantities of powdered sulphate and acetate of copper to a paste with crab verjuice, and then dress the foot with this every other day. Keep the foot in a gutta-percha boot till quite well.

Sheep—to mark without injury to the wool.—To thirty spoonfuls of linseed oil, add two ounces of litharge, one ounce of lamp-black; boil all together, and mark the sheep therewith.

Sheep—to cure when poisoned.—Take rue leaves, as many as you can grasp between thumb and fore-finger. Bruise them; squeeze the juice into a half teacup of water, and drench the sheep with it. If the sheep are poisoned very bad, drench the second time, which will never fail to cure.

Sheeps' Wool—care of.—Washing sheep under the present system of buying wool will, perhaps, be the prevailing practice. If care is taken to keep the sheep so that the wool will not be filled with dirt, it is better not to wash. Fleece should be done up with care, nicely rolled and securely tied with light twine. When it is known that a farmer puts up his wool in neat shape without any tags, etc., he will obtain the highest price. Everywhere, but especially here, "honesty is the best policy."

Sheets—to make.—Sheets should be three yards long and two breadths wide, unless made of full breadth linen. Linen sheets last longer than cotton ones, and in hot weather are the most comfortable, but in our variable climate cotton sheets are much preferable, especially for delicate or rheumatic people.

Sheet-iron Stoves—to preserve.—Sheet-iron stoves should be rubbed over once a week with a piece of flannel wet with a few drops of oil or melted lard.

Sheet of Paper—to split.—Get a piece of plate-glass and place on it a sheet of paper, then let the latter be thoroughly soaked. With care and a little dexterity the sheet can be split by the top surface being removed. But the best plan is to paste a piece of cloth or strong paper to each side of the sheet to be split. When dry, violently and without hesitation pull the two pieces asunder, when part of the sheet will be found to have adhered to one and part to the other. Soften the paste in water, and the pieces can be easily removed from the cloth. The process is generally demonstrated as a matter of curiosity, yet it can be utilized in various ways. If we want to paste in a scrap-book a newspaper article printed on both sides of the paper, and possess only one copy, it is very convenient to know how to detach the one side from the other. The paper when split, as may be imagined, is more transparent than it was before being subjected to the operation, and the printing ink is somewhat duller; otherwise the two pieces present the appearance of the original if again brought together.

Shelf (Mantel)—how to make.—If you have no mantel, and need something to take the place of one in your sitting-room or parlor, have a shelf cut about two yards and a quarter in length and a quarter of a yard in width out of a pine board; fasten it firmly upon two iron brackets with screws, and then screw the brackets to the place upon the wall where the shelf can go and be most useful. If you have the outer corners rounded, the shelf will look better when it is covered. Cover it with a pretty cretonne, tacking the cloth smoothly to the board; then make a curtain about a quarter of a yard deep, sew on the edge a cheap jute or fancy cotton fringe of the colors in the cretonne, and tack the upper edge neatly over the top, covering around the edge of the shelf. Over these tacks sew a narrow gimp.

Shirt-bosoms—to render glossy.—The best recipe for glossed shirt-bosoms is to take two ounces of fine gum arabic powder, pour on a pint or more of water, and then, having covered it, let it stand all night. In the morning pour it carefully from the dregs into a clean bottle, cork and keep it for use. Add a teaspoonful of this gum water to a pint of starch made in the usual way.

Shirts—proper way to do up.—An easy way, I have found, is to dissolve the starch in a little cold water, then pour on hot—not boiling—water, say half a pint to two teaspoonfuls of starch; wet the bosom in this, roll them up, let them lie two or three hours, and iron in the usual way.

When cuffs, collars, or shirts are to be ironed, so they can be worn some little time without becoming soiled, similar to laundry work, it requires more time and labor.

I have known one shirt, when "done up" as follows, to outlast two or three ironed the easier way: Dissolve two tablespoonfuls of starch in cold water, then pour on about a quart of boiling water, stirring all the time; add a piece of spermaceti the size of a large hickorynut, or some nice clean tallow, and let it boil until clear. Use as hot as possible, as it soaks in better. The cuffs and collars can be put into the hot starch with a spoon until cool enough to use the hands. Rub the starch in well, wring but little, and hang up to dry. If the clothes are starched after they have been dried they will absorb more starch and be much stiffer. When again dried, I usually wet them in some thin boiled or unboiled starch, as described above; then roll tightly—the cuffs and collars rolled in a dry cloth, dampened a little on the outside—and leave all over night before ironing. If the shirts are not wanted quite so stiff, wet them in hot water instead of thin starch. If any part is to dry in the morning, dampen with a wet cloth first, then rub all the wrinkles, if any, to the edge of the bosom or under the plaits, loosening the plaits and ironing in the usual way.

To polish after ironing, moisten the surface with boiled starch and iron briskly with a smoothing-iron (I use a nickle-plaited one). Cuffs and collars are treated similarly, but on the wrong side rst. If they are not yet stiff enough, rub in, while ironing, more thick

starch, cold or hot, and polish them as directed. When done, tip the iron and draw the edge back and forth over the inside of the cuff or collar, which will round it to the shape of the arm or neck.

The linen part of turn-down collars should be finished first, then the other part ironed on the wrong side, as it will turn over better. Any time when ironing, little specks or soiled spots can be rubbed off with a damp cloth. It will no doubt require some practice to do the above satisfactorily, but I trust that labor and patience will be rewarded with success.

Shirts—how to make.—He needed a new supply of shirts! When a bachelor, he had them made to order, at nine dollars per half dozen. I knew the material cost much less than that, and should I believe my more experienced friends, and acknowledge myself beaten by a combination of cotton and linen, without even a trial of strength? Pride and self-conceit cried, never! and this is how I accomplished my task.

A shirt which was past wear was carefully cut up. I did not rip it, fearing to stretch the pieces out of shape, but I cut close by each seam. When I had cut out half of the shirt, I ironed out each piece smoothly, and cut a paper pattern of each one, allowing for the seams I had cut off. A small difficulty arose here, as the old shirt was a little too low cut in the neck, but I allowed what I thought right for that. I bought nine yards of Wamsutta muslin for three shirts, though eight will do by piecing the sleeves, and three-eighths of a yard each of fine butcher's linen, he liking a short front. The materials for the three shirts cost what one shirt did when made to order.

I shrunk all the material before beginning to work, by scalding well in clear water, and shaking out to dry. Wringing creases the cloth, making it hard to iron, while if it is well shaken out and hung up smoothly, there will be little trouble.

Now I was all ready for work. I cut out only one shirt at first, as it was an experiment, but now I cut three at a time, then I can baste each one as far as possible, and stitch all at once. I first cut the opening down the middle of the back. The right side I hemmed very narrowly, the left side I faced, allowing the facing to project enough for a lap. The yokes I cut in one piece, making the fold come at the middle of the back. It makes a neater finish than a seam there. Gathering each side of the back, I stitched the yokes on, wrong side first, then turned them up and stitched them again. I faced the fronts with muslin the whole width to three inches below the armhole. It makes them wear much longer. The bosom was one thickness each of linen and butcher's linen, with one narrow tuck turning each way from the center, simulating a wide plait stitched on either edge. I merely turned in the edges and stitched twice around the edge, then I joined the front and back, and put on the band. This is the most difficult part, but it is easy, if you are careful not to stretch either part. Then came the hemming of the bottom, and finishing the sleeves at the wrists, which I do by narrow hems on

each side, and narrow muslin bands. Muslin wears better than linen. I allow an inch on the sleeve in sewing it in the armhole, and turn down the overlapping edge and stitch it like a hem. Sew all up in a long seam and fell it. Add gussets at the wrist and bottom. Work the button-holes and all is done. I put no buttons on, but use pearl or gold studs at wrists and all.

Shirt making has no terrors for me now, but is rather a pleasure, for I know my pattern is all right, and there is no guess work.

Shoe-bag—to make.—Reading of the different receptacles for shoes, in the way of shoe-cases, bags and boxes, I became interested, and went to work to construct one for my own use, and now, as it is unlike all the others I have noticed, I find myself wanting to tell of it. Although made of very homely materials, it has turned out to be rather ornamental, and as it is so cheap, may be some one else will want to make another.

I took a fine, brown coffee-sack, cut it one yard in length, twelve inches wide, and three pockets, ten inches deep and same width as the back. I worked a heavy border in coral stitch around the top, and around each pocket, with scarlet yarn, using it double to make the pattern large enough to suit the canvas. The first pocket I ornamented with a design in canvas, doing it in double cross stitch, and enlarging by passing over eight threads, instead of two. On the second pocket is the word "Shoes," and on the third my initials. The pockets overlap a little. Then I bound it all around with scarlet dress braid, putting two loops on the top. It requires to be tacked at each pocket to keep it in place or shape. I like the coral pattern because it is so quickly done, and use it in preference to all others for this kind of work.

Shoe-box.—A nice stool can be made by taking a soap-box or any small-sized box from a grocery store; fix a lid by nailing pieces of leather on for hinges; fasten a piece in front to lift it up, then cover it with pieces of carpet tacked on with brass-headed nails; cut some pieces of old quilts to pad the top, then cover with carpet and trim around the lid with any old cast-off fringe. This makes a convenient piece of furniture, useful for keeping shoes in, out of sight.

Shoe-soles—how to preserve.—Melt together tallow and common resin, in the proportion of two parts of the former to one of the latter, and apply the preparation, hot, to the soles of the boots or shoes—as much of it as the latter will absorb. One farmer declares that this little recipe alone has been worth more than five dollars.

Shoe and Harness Edge—best color for.—Alcohol, one pint; tincture of iron, one and one-half ounces; extract of logwood, one ounce; pulverized nutgalls, one ounce; soft water, one-half pint; sweet oil, one-half ounce; put this last into the alcohol before adding the water. Nothing can exceed the beautiful finish imparted to the leather by this preparation.

Shoeing Horses.—A smith who shod for the hunt, and who said that he would have to shut up shop if a shoe was lost, as it might

cause the loss of a horse worth a thousand pounds, fastened the shoe as follows: As he drove the nails, he merely bent the points down to the hoof, without twisting them off, as the usual practice is; he then drove the nails home and clinched them. He then twisted off the nails, and filed them lightly to smooth them, thus having, as he remarked, a clinch and a rivet to hold the nails.

Shortcake (Strawberry)—how to make.—1. If one partakes of strawberry shortcake in half a dozen different cafes, it is likely that a different preparation will be served at each. The old-fashioned shortcake is in many cases replaced by a kind of confectionery, made with slices of cake (somewhat like pound-cake) covered with whipped cream, in which a few strawberries are imbedded. This is quite unlike the real thing. Among the recipes for shortcake that have been tried, the following was preferred: Flour, one quart; butter, three tablespoonfuls; buttermilk (or rich sour milk), one large cupful; one egg; white sugar (powdered), one tablespoonful; soda (dissolved in warm water, one teaspoonful; salt, one saltspoonful. Mix the salt and sugar with the flour; chop up the butter in the flour; add the egg and soda to the milk and mix, handling as little as possible. Roll out lightly, lay one sheet of paste upon the other in a round tin; bake. While still warm, separate the cakes, and place between them a thick layer of strawberries, which should be abundantly sugared. Some place a layer of the fruit on the upper cake. It is eaten with sugar and cream.

2. To make a nice strawberry shortcake, make a nice, rich biscuit crust, bake in a round tin, and when baked cut in two parts with a sharp knife; put a thick layer of berries, sweetened to taste, on one half, then lay on the other half and fix in the same manner. Some think a cup of sweet cream poured over the top layer a great addition. The berries should be mashed before placing them on the cake.

Shot (Lead).—Lead shot are cast by letting the metal run through a narrow slit into a species of colander at the top of a lofty tower; the metal escapes in drops, which, for the most part, assume the spherical form before they reach the tank of water into which they fall at the foot of the tower, and this prevents their being bruised. They are afterward riddled or sifted for size, and afterward churned in a barrel with black lead.

Sickness of Stomach—to relieve.—The following drink for relieving sickness of the stomach was introduced by Dr. Halahan, and is said to be very palatable and agreeable: "Beat up one egg very well, say for twenty minutes, then add fresh milk, one pint; water, one pint; sugar, to make it palatable; boil, and let it cool; drink when cold. If it becomes curds and whey it is useless.

Sick-room Hints.—A sick-room should be as far removed as possible from a bath-room, or any large amount of plumbing. In case of a severe contagious disease the sick should be removed to the top of the house and the patient and nurse isolated from the rest of the family. A sunny room if possible should be chosen for the sick, as sun-

light is one of the best disinfectants known. It is desirable to have as little upholstered furniture about the sick-room as possible. The bed should always be placed where drafts cannot come, and so that the patient can be reached on either side. In cases of infectious diseases the clothing of the patient should be changed day and night, and the room should be swept in such a way as not to raise dust, at least every other day. The nurse should always wear clothing that can be washed. She should dress simply and neatly. An overdressed nurse irritates a sick person. A bustling nurse is annoying. The nurse should be watchful, but never obtrusive. She should be careful that the temperature of the room does not go below sixty-eight or seventy degrees in the early morning hours, as at this time the powers of the body are at their lowest ebb. The greatest number of deaths occur between two and four A. M. Never use anything but light blankets to cover the sick. The heavy, impervious counterpane is bad, for the reason that it keeps the exhalations from the pores of the sick person, while the blanket allows them to pass through. Weak persons are invariably distressed by a great weight of bedclothes, which often prevents their getting any sound sleep whatever.

Sick-room Rules.—Keep the patient, and all about him, perfectly clean, and secure, as far as possible, pure air. The chamber should be ventilated at least once a day, or twice if it can be borne. The bedclothes should be carried out into the open air, if it is dry, if not, into the next room; and if the patient is unable to sit up meanwhile, let them be supplied by others.

Keep the room quiet, and in perfect order.

Let the sick be addressed in a gentle voice, and the conversation, if any is admitted, be pleasant and cheering. The nurse and friends should express sympathy with the sufferer, but at the same time seek to inspire courage, and patience to endure.

All vials and powders should be labeled, to prevent fatal mistakes.

The beds should be made at least once a day, and if the patient can bear it, twice. Carry the beds out into the open air, or if damp, into another room.

Keep the skin clean by daily ablutions; change the garments frequently, and rinse the mouth often.

A nurse should be of a pleasant, agreeable, persuasive and even temper, with great patience to bear with the whims and unreasonable fretfulness that often appear in the sick.

Never dispute with a very sick person, nor reprove him for any seeming inconsistency. Remember that he is hardly a responsible being.

Silk—ways to clean.—1. Use potato-water for all colors and kinds; grate some potatoes into cold spring water, say a large potato to every quart of water, of which five or six will do for a couple of dresses. If for very light silk, pare the potatoes; if any way dark, merely wash them clean. The pan of water must not be stirred in the least for forty-eight hours; then very slowly and steadily pour off

the clear liquor, but not a particle of the sediment, into an open vessel—a bath, or such like. Dip the pieces of silk into this liquid up and down a few times, without the least creasing them; then wipe them on a flat table with a clean towel, first one side and then the other. It is as well to hang each one as dipped upon a line, to allow the drops to drain off a little before wiping. Have a damp cloth to cover them in till they are done, then iron one way on the soiled side. It is astonishing to see how nice a dress looks done in this manner.

2. Mix together a quarter of a pound of soft-soap, a teaspoonful of brandy and a pint of gin; mix all well together and strain through a cloth. With a sponge or flannel, spread the mixture on each side the silk without creasing it; wash it in two or three waters; while damp iron on the wrong side. This process will restore silks to their newness and will not injure the most delicate color.

The Parisian method of cleaning black silk is very simple, and the result infinitely superior to that achieved in any other manner. The silk must be thoroughly brushed and wiped with a cloth, then laid flat on a board or table, and well sponged with hot coffee thoroughly freed from sediment by being strained through muslin. The silk is sponged on the side intended to show; it is allowed to become partially dry, and then ironed on the wrong side. The coffee removes every particle of grease and restores the brilliancy of silk without imparting to it either the shiny appearance or crackly and papery stiffness obtained by beer, or, indeed, any other liquid. The silk really appears thickened by the process, and this good effect is permanent. Our readers who will experiment on an apron or cravat, will never again try any other method.

Silk—to restore its color.—When the color of silk has been destroyed by any strong acid, it may be restored by carefully wetting the spot with a strong soap lather, to which a little saleratus has been added. When the color has been taken out by fruit stains ammonia will restore it.

Silk (Old)—to revive.—When silk has lost its gloss and become limpsy it may be restored by sponging with a solution of half an ounce of gum tragacanth in a pint of hot water.

Silk (Black)—to renovate.—A little rock ammonia (bought at the druggist's) and a piece of common soda put into a bottle, and about half a pint of boiling water poured on to dissolve them ; then, when cold, sponge the silk with the liquid on the right side, and iron it on the wrong). This recipe wonderfully improves anything black, and is quite good for cloth, though, of course, that must not be ironed.

Silk—to remove grease from.—Take a lump of magnesia and rub it wet over the spot; let it dry, then brush the powder off, and the spot will disappear; or, take a visiting card, separate it, and rub the spot with the soft internal part, and it will disappear without taking the gloss off the silk.

Silk (Black)—to clean.—Sponge the black silk lightly, on both sides, with a perfectly clean sponge dipped in spirits of wine; then, with a moderately warm iron, smooth the silk over on one side, not the side that will form the outside when remade. If the selvages are too tight to allow the silk to become smooth, they will require snipping at intervals.

Silver (Counterfeit)—U. S. Mint test for.—Make a solution of twenty-four grains nitrate of silver, thirty drops nitric acid, and one ounce of water; scrape the coin to be tested and apply a drop of the liquid; if the coin turns black, reject it.

Silver-plated Articles—ways to clean.—1. White metal articles, electro-plated with silver, should be cleaned with the greatest caution. The use of soap gives to the articles a leaden appearance. If tarnished, rub them with a little fine whiting, wet with water; then wash with clean, soft, warm water. Dry carefully, and polish with fine whiting on a piece of soft leather.

2. The disagreeable discoloration of egg can be readily taken from silver spoons by washing them in potato water—water in which potatoes have been boiled. It is much better than salt, as it does not scratch the metal. The taste of fish may be removed very effectively from steel knives and forks by rubbing them with fresh orange or lemon peel.

3. Save water in which potatoes have been boiled with a little salt; let it become sour, which it will do in a few days; heat, and wash the articles with a woolen cloth, rinsing in pure water; dry and polish with chamois leather. Never allow a particle of soap to touch silver or plated ware.

4. Silverware may be kept bright and clean by coating the articles (warmed) with a solution of collodion diluted with alcohol.

Silver (Polished)—to frost.—Cyanide of potassium, one ounce; dissolved in one-half pint of water. Do not hold the silver in your hands, but use pliers made of lance wood or box wood, and apply the mixture with a brush to the polished surface.

Silvering Hooks and Eyes, etc.—The small iron articles are suspended in dilute sulphuric acid until the iron shows a bright clean surface. After rinsing in pure water they are placed in a bath of a mixed solution of sulphate of zinc, sulphate of copper and cyanide of potassium, and there remain until they receive a bright coating of brass. Lastly, they are transferred to a bath of nitrate of silver, cyanide of potassium and sulphate of soda, in which they quickly receive a coating of silver.

Silver-plating—method.—Put eight silver shillings into two ounces of nitric acid. When the silver disappears, throw into it a pint of water and four ounces of common salt. The salt will throw down a powder, which is pure silver. Now decant off the water and repeat the same washings till all the effects of the salt shall have disappeared. Now add to this white powder two ounces of cyanide of potassium, and three ounces of hyposulphate of soda. Now add

to all this two quarts of pure rain water, and your silver mixture is complete.

Now you may do, by the aid of this mixture, all sorts of plating—watch-chains, rings, medals, watches, ornaments, steel, iron and German silver goods of every description, as spoons, spectacles, etc.

Hang any of these articles in the solution, suspended at the end of a strip of lead, or you can immerse the article and boil it ten or twenty minutes, according to the thickness of the silvering that you desire. If the articles to be plated are clean, a pure and durable silver surface will be the result.

Silvering Shells.—Of silver leaf and gum-water take a sufficient quantity; grind to a proper thickness, and cover the inside of the shells. For a gold color, grind up gold-leaf with gum-water, and apply to the inside of the shells.

Silver—to give luster to.—Dissolve a quantity of alum in water so as to make a pretty strong brine, and skim it carefully; then add some soap to it, and dip a linen rag in it, and rub over the silver.

Silvering on Mirrors—to repair.—Pour upon a sheet of tin-foil three drams of quicksilver to the square foot of foil. Rub smartly with a piece of buckskin until the foil becomes brilliant. Lay the glass upon a flat table, face downward, place the foil upon the damaged portion of the glass, lay a sheet of paper of the foil, and place upon it a block of wood or a piece of marble with a perfectly flat surface; put upon it sufficient weight to press it down tight; let it remain in this position a few hours. The foil will adhere to the glass.

Silver Solution—for plating German silver, copper, brass, etc.—Take three ounces nitric acid, put it in a bottle, and add one American twenty-five cent piece, cut fine. Let it dissolve. Add three ounces quicksilver. Let it dissolve. And two quarts rain water, and it is ready for use. Directions for use: Immerse the article to be plated in the solution. Let it remain a few minutes. Now rub gently with a piece of sponge wet with the solution, and polish with buckskin. The thickness of the plate may be increased by repeating.

Silver—to write in.—Mix one ounce of the finest pewter or block tin and two ounces of quicksilver together, till both become fluid, then grind it with gum-water and write with it. The writing will then look as if done with silver.

Sizing for Boots and Shoes in Treeing Out.—Water, one quart; dissolve in it, by heat, isinglass, one ounce; adding more water to replace loss by evaporation; when dissolved, add starch, six ounces; extract of logwood, beeswax, and tallow, of each two ounces. Rub the starch up first by pouring on sufficient boiling water for that purpose. It makes boots and shoes soft and pliable, and gives a splendid appearance to old stock on the shelves.

Skate-bags.—A variety of materials can be used, such as gray Holland, trimmed with braid; take a piece a little longer than the

skates, and twice the width of a pair. Fold and make into a bag, and bind it all around; line with flannel to match the braid, letting it come about an inch above the bag, and hem over, to make a shir at the top. Run a double draw-string of braid in this shir, and the bag is done. A very pretty bag can be made of canvas, with "Skate-bag" worked in the center.

Skirt—for a child.—A good way to utilize ribbed socks when the feet are past wearing, is to cut the legs off straight above the heel, open up the back, sew, or crochet, enough of them together to give width for child's skirt, making shell trimming for the bottom, and sewing into a band at the waist. These are warm, durable, and pretty, and little trouble to make.

Slaugh (Kohl)—to make.—One head of cabbage minced fine, two hard-boiled eggs, two tablespoonfuls of salad oil, two tablespoonfuls of white sugar, one and one-half teaspoonfuls of salt, one teaspoonful of pepper and made mustard, one teaspoonful of vinegar; mix all together thoroughly.

Sleep—how to obtain.—I venture to suggest a new but simple remedy for want of sleep. Opiates in any form, even the *liquor opii sedat* and chloroform will leave traces of their influence the next morning. I therefore prescribe for myself—and have frequently done so for others—onions; simply common onions, raw, but Spanish onions, stewed, will do. Everybody knows the taste of onions; this is due to a peculiar essential oil contained in this most valuable and healthy root. This oil has, I am sure, highly soporific powers. In my own case they never fail. If I am much pressed with work and feel I shall not sleep, I eat two or three small onions, and the effect is magical. Onions are also excellent things to eat when much exposed to intense cold. Finally, if a person cannot sleep, it is because the blood is in the brain, not in the stomach. The remedy, therefore, is obvious. Call the blood down from the brain to the stomach. This is to be done by eating a biscuit, a hard-boiled egg, a bit of bread and cheese, or something. Follow this up with a glass of milk, or even water, and you will fall asleep, and will I trust, bless the name of the writer.

Sleeplessness—remedy for.—1. A cup of hot Indian gruel, taken at the moment of retiring, will make the nervous tension cease, occupies the stomach, and the brain rests. Eat a light supper before it. Two teaspoonfuls of Indian meal, one of flour; wet only to a smooth paste. Pour boiling water slowly upon it, beating it as you pour. Salt it, and boil half an hour. It can be made while tea is getting, and warmed over the gas at bedtime.

2. For sleeplessness a high London authority recommends, instead of stimulants, a breakfastcupful of hot beef tea, made from half a teaspoonful of Liebig's extract. It allays brain excitement.

3. A glass of milk taken on going to bed at night sometimes assists in overcoming sleeplessness. In the New York Inebriate Asylum a

glass of milk is frequently administered at bedtime to produce sleep, and the result is often satisfactory, without the use of medicine.

4. It is not necessary to go to the bromide or chloral bottle to make sleep. Tying the head firmly in a large handkerchief or fine towel (or clean long stocking), turban fashion will bring it. The nerve strain is lessened in some way, and thought is not concentrated on any present matter. Naturally sleep comes after this.

5. A rubber bag of hot water at the feet, or other warm or gently irritating application, will often so draw down the blood from the excited brain that one will soon fall into a quiet sleep. Ten to twenty drops of aromatic spirits of ammonia swallowed in half a tumbler of water on going to bed, or when restless or wakeful during the night, will very often put one into an easy slumber. It is quickly absorbed into the blood, and carried to every part of the body, producing a gentle stimulus. This calls the blood to every point, equalizing the circulation, and thus relieving the before excited brain.

Sleep—necessary rules for.—There is no fact more clearly established in the physiology of man than this, that the brain expends its energies and itself during the hours of wakefulness, and that these are recuperated during sleep. If the recuperation does not equal the expenditure, the brain withers; this is insanity. Thus it is in early history, persons who were condemned to death by being prevented from sleeping always died raving maniacs, and those who are starved to death become insane; the brain is not nourished and they cannot sleep. The practical inferences are three:

1. Those who think most, who do the most brain work, require the most sleep.

2. The time "saved" from necessary sleep is infallibly destructive to mind, body and estate.

3. Give yourself, your children, your servants, give all that are under you, the fullest amount of sleep they will take, by compelling them to go to bed at some regular early hour, and to rise in the morning at the moment they awake, and, within a fortnight, Nature, with almost the regularity of the rising sun, will unloose the bonds of sleep the moment enough repose has been secured for the wants of the system. This is the only safe and efficient rule.

Slugs on Plants—to destroy.—1. Any choice plants may be preserved from the ravages of slugs by placing a few pieces of garlic near them. No slugs will approach the smell of garlic. Fruit-trees may be protected from slugs by tying a piece of hair-line, or binding a bit of hair-cloth round their stems; if the trees are against the wall, the hair-line should be fastened all along the bottom of the wall close to the brickwork, and no slugs can pass it.

2. Greenhouse slugs often become a nuisance in the greenhouse. A certain remedy is to sprinkle salt freely along the edges of the bench or table, the crossing of which is sure death to the slug.

3. Slugs are very voracious, and their ravages often do considerable damage, not only to the kitchen-garden, but to the flower-beds

also. If, now and then, a few slices of turnip be put about the beds, on a summer or autumnal evening, the slugs will congregate thereon, and may be destroyed.

Small-pox—cure for.—A physician writes: I am willing to risk my reputation as a public man, if the worst case of small-pox cannot be cured in three days simply by cream of tartar. This is a never-failing remedy: One ounce of cream of tartar, dissolved in one pint of boiling water, to be taken when cold. Dose, two tablespoonfuls every two hours. It is also a preventive; dose, as before, three times a day. It has cured thousands, never leaves a mark, never causes blindness, and avoids tedious lingering.

Small-pox—remedies.—1. A correspondent writes: Appended is a recipe which has, to my certain knowledge, been used successfully in hundreds of cases. It will prevent or cure the small-pox, though the pittings are filling. It is as unfailing as fate, and conquers in every instance. It is harmless when taken by a well person. It will also cure scarlet fever. Here is a recipe: Sulphate of zinc, one grain; foxglove (digitalis), one grain; half a teaspoonful of water. When mixed, add four ounces of water, and take a tablespoonful every hour. Either disease will disappear in twelve hours. For a child, smaller doses according to age. If counties would compel their physicians to use it, they would need no pest-houses. If you value advise and experience, use this for that terrible disease.

2. A child nine years old was effectually cured of small-pox by administering fifteen grains sodæ sulphice dissolved in milk, sweetened, every three hours. The entire body was oiled with crude petroleum applied by hand. Next morning the eruption was killed and dry, and the disease broken up. To prevent pitting with small-pox, as soon as the disease is distinguished, apply an ointment made of lard and charcoal to the face, neck, hands, etc., and continue until all signs of supperative fever has ceased. One case is worthy of notice, being that of a gentleman who suffered terribly for many days with this dreadful disease. Everything was done for him that medical skill could suggest, without giving the slightest relief. Finally, as a last resort, he was removed from the bed and placed in a warm bath; the transition was so soothing and delightful that he exclaimed: "Oh, my God, I thank Thee for this great relief!" In a short time he fell sound asleep in the bath, and continued in this position for many hours, the water being renewed from time to time to keep up the temperature. The cure proved to be immediate and permanent. Nothing is so conducive to health of body, and the eradication of disease therefrom, as the intelligent use of pure water. Sir Astley Cooper, being complimented on one occasion for his great skill, remarked, that he had "made mistakes enough to fill a graveyard," but it is scarcely possible to make a mistake with water, as no diseased person can fail to derive benefit from its use.

Small-pox—to prevent pitting.—When the pustules begin their intolerable itching I keep them moistened with iodized collodion,

spread on with a camel's-hair brush. This allays the irritation at once, and the pustules fall off rapidly, leaving not a trace of pitting behind. The preparation is made as follows: Compound sulphate ether and alcohol, ninety-five degrees, equal parts; bromide potassium and iodide potassium, each five grains to the ounce; pyroxylon, one and one-half grains to the ounce.

Smelling Bottles—to fill.—Take equal parts of sal-ammoniac, crushed to a coarse powder, and pearl-ash, mixed together, and perfume it with two or three drops of some essential oil, like neroli, or lavender. Strength is increased by holding the bottle in the warm hand. Concentrated acetic acid can be used instead of salts of ammonia, and then the bottle should be first filled with a few crystals of sulphurate of potash, and some small bits of sponge moistened with the acid, and the perfume can be dropped upon them.

Smelling Salts.—Sub-carbonate of ammonia, eight parts; put it in coarse powder in a bottle, and pour on it oil of lavender, one part; mix.

Smilax—how to grow.—Smilax is an exceedingly graceful vine with glossy, green-ribbed leaves, and is now more extensively used than any other plant for decorating parlors, the hair, and for trimming dresses. With a little care it can be grown successfully as a house plant. The vine does not require the full sun, but will grow well in a partially shaded situation. It can be trained on a small thread across the window or around the pictures. Grown from both seeds and bulbs. Pot the bulbs as soon as received, watering but little until you see signs of growth. They grow very rapidly and should always have strings to twine on. Give plenty of fresh air, but be careful and not let a direct draft of cold air blow upon the vines, as they are very tender when young. Give them a warm place and they will amply repay all care. When growth is complete the foliage will turn yellow. Then gradually withhold water and allow the bulbs to dry. They then can be put in some cool, dry place. After they have been in this dormant state six or eight weeks they will begin to show signs of life, and then are ready for another season's growth.

Smilax—for a curtain.—Last season I slipped some smilax out of a small pot into a box which I set on a shelf that was on the outside of a south window. This shelf was eight inches below the top of the window-sill. The box was six inches deep, and so was a little lower than the sill. With a red-hot poker I burned a row of holes around the sides of the box, and filled it with a light, rich soil. When the plant was fully established and had sent up nice thrifty sprouts, I drove nine small nails along the top of the window-pane, and slipped on to them the looped up ends of a fine cord; the other ends of the cord were tied each to a nail which was stuck in the box by the sprout it was intended to support. The vines grew rapidly, and in a few weeks' time had reached the top of the window; a week or two more, and the ends were drooping down from the top, thus forming a

graceful valance to my beautiful curtains—a curtain far more beautiful than any made by mortal hand could every be. In October, when the nights were growing frosty, I slipped the looped ends of the cords that supported the vines off the nails, and placed the box with the vine on a stand on the inside of the window and slipped the loops over nails, and so, without any trouble at all, had my window adorned with this lovely vine until Christmas. This vine so airily light, and so graceful, is peculiarly appropriate for the adornment of thin evening dresses, and as lovely for the hair.

Snake Bites—cure for.—The inspector of police in the Bengal government reports that of nine hundred and thirty-nine cases in which ammonia was freely administered, two hundred and seven victims have recovered, and in the cured instances the remedy was not administered till about three and a half hours after the attack; on the average of the fatal cases the corresponding duration of time was four and a half hours.

Snow Balls (Apple).—Take half a dozen large apples (Rhode Island greenings are the best for the purpose). Pare these, and remove the cores carefully with a corer, that they may not be broken. Place in the hollow of each a large spoonful of sugar, together with a small piece of butter, and a little grated nutmeg, or, if preferred, a little grated rind of a lemon. Have boiled in milk a cupful of rice, which should be only about half cooked. Take six cloths large enough to enclose the apple, with room to tie. Now spread the rice upon these and tie them firmly around each apple; then plunge them into boiling water, and let them boil gently for three-quarters of an hour, or till done. Remove the cloths, and serve either with a little sweet sauce or with sifted white sugar strewn thickly over them.

Snow Water.—to prevent from penetrating shoes.—This simple and effectual remedy is nothing more than a little beeswax and mutton suet, warmed in a pipkin until in a liquid state. Then rub some of it lightly over the edges of the sole where the stitches are, which will repel the wet, and not in the least prevent the blacking from having the usual effect.

Snuff (Cephalic)—Take asarbacca leaves, marjoram, light Scotch snuff, equal parts; grind and sift; use like common snuff.

Soap—to manufacture.—When wood ashes cannot conveniently be had, it is usual for soap manufacturers to use equal quantities of recently slaked lime, and sal-soda, soda ash or caustic soda, using water enough to give the lye sufficient strength to support a fresh egg. It must be very strong. The solution can be effected by heat, or stirring, or by both methods, finally drawing off, or bailing out the liquid clear of sediment, previously throwing in salt and giving time for the sediment to settle; one ton of yellow soap will require one thousand pounds tallow and three hundred and fifty pounds resin, with lye sufficient. The same amount of white soap will require nearly one thousand three hundred pounds of tallow, boiling in every case with the proper quantity of lye, until it forms a perfectly homogenous

mass by a perfect blending of the component parts all together, when it is poured out into suitable frames to harden and cool. It is afterward cut up into proper sized bars by means of wires to which handles are attached, and then piled up to dry.

Soap (Almond).—Best white tallow soap, fifty pounds; essence of bitter almonds, twenty ounces; melt by the aid of a steam or water bath.

Soap-bubbles—to make,—Prepare some soap-suds, and let me tell you how you can make splendid soap-bubbles which will last for hours. Dissolve one part of soap in forty parts of water; put this soap solution into a bottle and add about two-thirds the quantity of glycerine, and shake up vigorously. Then allow the bottle to stand for some time, when the liquid will have separated into layers, the upper of which is to be poured off, and the clear underlayer kept for blowing bubbles. Now for our experiment. Dip a brass curtain-ring into soap-suds or the above solution, so as to get a flim over it, and when the color begins to appear on the edge of film, if you hold up the ring before your face and sing any of the vowels or all of them, one after another, near it, it will show beautiful rippling patterns of color, which differ with the different sounds.

Soap (Erasive).—Genuine erasive soap that will remove grease and stains from clothing is made as follows: Two pounds of good castile soap, half a pound of carbonate of potash, dissolved in half a pint of hot water. Cut the soap in thin slices, and boil with potash until it is thick enough to mold in cakes. Add alcohol, half an ounce; camphor, half an ounce; hartshorn, half an ounce. Color with an ounce of pulverized charcoal.

Soap (English Bar).—Six gallons soft water; six pounds good stone lime; twenty pounds sal-soda; four ounces borax; fifteen pounds fat (tallow is best); ten pounds pulverized resin, and four ounces of beeswax; put the water in a kettle on the fire, and when nearly boiling add the lime and soda; when these are dissolved, add the borax; boil gently, and stir until all is dissolved; then add the fat, resin, and beeswax; boil all gently until it shows flaky on the stick, then pour into molds.

Soap (Hard)—for common use.—1. Three pails of good soft soap, one pound of resin, one pound of borax, and two and a half quarts of salt; put in a kettle, and let it just boil; then set in a cool place over night; it will rise like tallow, and can be cut in pieces; the longer it is dried, the better it keeps the hands soft, and lasts well. Those who study economy will like it.

2. Six pounds of washing soda, three pounds of unslaked lime; put together and pour on four gallons of boiling water; let it stand until clear; then drain off and put in six pounds of clean fat, and boil until it hardens (about two hours) over a slow fire. While boiling add two gallons of cold water which you have poured on the alkaline mixture, letting this also settle before using. Add when there is danger of boiling over. Try the consistency by cooling a little on a

plate. Put in a handful of salt just before taking from the fire. It may be poured into a wet tub, but I prefer to mold in deep earthen dishes. Cut in bars and put on a board to dry. Do not let it freeze while drying. This makes forty pounds, and is especially nice for rough hands.

3. Two and one-half pounds of unslaked lime, to which pour six quarts of boiling water; two and a half pounds of sal-soda, to which pour six quarts of boiling water. Let it stand until the sal-soda is dissolved. Then pour the sal-soda water into the lime and water and let it stand twenty-four hours. Then pour off the liquid and add two pounds of grease and one-fourth pound of resin. Boil one hour and pour into molds to cool. Perfume as you please.

Soap (Camphor).—Curd soap, twenty-eight pounds; attar of rosemary, one and one-fourth pounds. Reduce the camphor to powder; add one ounce almond oil; then sift it; when the soap is melted and ready to turn out, add the camphor and rosemary.

Soap (White Windsor).—Curd soap, one hundred pounds; marine soap, twenty-one pounds; oil soap, fourteen pounds; oil caraway, one and one-half pounds; oil thyme and rosemary, of each, half a pound; oil of cassia and cloves, of each, one-fourth pound.

Soap (Brown Windsor).—Curd soap, seventy-five pounds; marine soap, twenty-five pounds; yellow soap, twenty-five pounds; oil soap, twenty-five pounds. Brown coloring (caramel), one-half pint; oils caraway, cloves, thyme, cassia, petit grain and French lavender, of each, two ounces.

Soap (Sand).—Curd soap, seven pounds; marine soap, seven pounds; sifted silver sand, twenty-eight pounds; oils thyme, cassia, caraway and French lavender, of each, two ounces.

Soap (Soft)—to make.—To one pound of potash add three gallons of water; boil the potash until it is dissolved; then add three pounds of any kind of soap grease, the cleaner the better, to the lye, and set it to boiling. Let it boil slowly so that it will not boil over. It usually becomes soap after boiling from one to five hours. If it boils down before it becomes soap, add sufficient water to keep the same quantity in the kettle until it is soap; then add nine gallons of water and stir well together; when cool this will be a beautiful white soap, if the grease was clean.

Soap—to save.—Make a small square bag of flannel, leaving one end partly open. In this put all the remains of soap as the pieces become too small to handle easily. When the bag is filled, baste up the opening, and it makes a good bath-tub arrangement.

Soap (Toilet).—Take two pounds of pure beef tallow, two pounds of sal-soda, one pound of salt, one ounce of gum camphor, one ounce of oil of bergamot, one ounce of borax; boil slowly an hour; stir often; let it stand till cold; then warm it over, so it will run easily, and turn into cups or molds, dipped in cold water. This is very nice for toilet purposes, and is greatly improved by age.

Soap (Transparent).—Slice six pounds nice yellow bar-soap into

shavings; put into a brass, tin or copper kettle, with alchohol, one-half gallon, heating gradually over a slow fire, stirring till all is dissolved; then add one ounce sassafras essence, and stir until all is mixed; now pour into pans about one and one-half inches deep, and when cold cut into square bars the length or width of the pan, as desired.

Soap (White Hard)—with tallow.—Fresh slaked lime, sal-soda, and tallow, of each, two pounds; dissolve the soda in one gallon boiling soft water; now mix in the lime, stirring occasionally for a few hours; after which, let it settle, pouring off the clear liquor, and boiling the tallow therein until it is all dissolved; cool it in a flat box or pan, cut into bars or cakes as desired. It may be perfumed with sassafras, oil or any other perfume desired, stirring it in when cool. One hundred pounds soap, very cheap: Potash, six pounds; lard, four pounds; resin, one-fourth pound. Beat up the resin, mix all together, and set aside for five days; then put the whole into a ten gallon cask of water, and stir twice a day for ten days, when it is ready for use.

Soap—what to do with waste pieces.—Cut the pieces into small bits and cover them with water. Place them upon the range, where they will gradually dissolve into a jelly-like paste; add a little perfume. When thoroughly dissolved, pour into a square-sided pan, and when cold, cut into cakes.

Soap (Yankee Shaving).—Take three pounds of white bar-soap; one pound castile soap; one quart rain water; one-half pint beef's gall; one gill spirits of turpentine. Cut the soap into thin slices, and boil five minutes after the soap is dissolved; stir while boiling; scent with oil of rose or almonds. If wished to color it, use one-half ounce vermilion.

Soda (Cream).—To one gallon of water, add five pounds of loaf sugar, one ounce Epsom salts, one ounce cream tartar, and five ounces tartaric acid. Boil the preparation well, skimming off the refuse matter accumulating upon the surface. After cooling, set it away in bottles in a cool place. When desiring soda drinks, put two or three tablespoonfuls of this syrup into a tumbler two-thirds full of water; add one-fourth of a teaspoonful of super-carbonate of soda; stir briskly, and the effervescence will be equal to that from fountain soda. The Epsom salts, cream of tartar, tartaric acid, and super-carbonate of soda, can be purchased for a small sum at any drug-store.

Sofa Pillow—to make.—1. A lovely sofa pillow is made of a square of pale-blue satin embroidered or painted. Use this for the center of the pillow, and at the top and bottom put bands of terra-cotta plush, and at the side old-gold plush. Sew all the seams together on the wrong side, and at the right side finish in herring-bone stitch with colored embroidery silk; edge with a short silk fringe. Cover the under side of the pillow with pale-blue sateen, and then put on the top covering, and you will have a beautiful sofa pillow.

2. When one cannot embroider, or does not wish to give the time to it, a very pretty substitute for it is found in applique. Get the fine, nice cretonne, with bright colored flowers. Cut these out and baste upon your foundation, which may be of satin, silk, plush or sateen. Hem them down with fine cotton, and then embroider them down, selecting carefully the silks that match with the flowers. Use the button-hole stitch for that purpose. Make the stems with the silk rather than those of the calico. The effect, when completed, is as handsome as painting, and more durable.

Solder—to apply.—Moisten the parts to be united with soldering fluid; then, having joined them together, lay a small piece of solder upon the joint and hold over your lamp, or direct the blaze upon it with your blow-pipe until fusion is apparent. Withdraw them from the blaze immediately, as too much heat will render the solder brittle and unsatisfactory. When the parts to be joined can be made to spring or press against each other, it is best to place a thin piece of solder between them before exposing to the lamp. Where two smooth surfaces are to be soldered one upon the other, you may make an excellent job by moistening them with the fluid, and then, having placed a sheet of tin foil between them, holding them pressed firmly together over your lamp till the foil melts. If the surfaces fit nicely, a joint may be made in this way so close as to be almost imperceptible. The bright looking lead which comes as a lining to tea boxes works better in the same way than tin foil.

Soil for Plants.—Knowing that nearly every lady in the city finds it hard to get manure of the right quality for her plants, I thought this suggestion might be of some use to them. Gather up the falling leaves and put them in an old box, or in some obscure corner where they will not have to be removed. After getting all you want, pile them in as close quarters as possible, then throw on them all of your dish-water, wash-water, or any water that will help to make them rot. Every week or two take a stick and turn the leaves over, and keep on doing this until they are all rotten, which they will be in a short time, and you will have as good a manure as any florist could want. If you could get the droppings from a cow and put them in an old dish and pour water on them; let it stand for a day or two; then take the liquid and pour it around the roots of the plant; it will give it a dark green color and make it grow very fast; but in putting the last named on the roots do not let any get on the leaves. As nearly every lady has some plant which they cannot pot, from its large size, they would be very glad to know of some way in which they can enrich the soil without going to the trouble of taking the plant out of the pot. By putting the liquid on every month it will make the soil nearly as rich and do the plant as much good as if they had put it in rich soil. Fine charcoal is excellent to mix with the soil when potting plants, or to sprinkle on the surface of the soil of those already potted. It stimulates the growth of the plants and deepens the colors. Iron filings from a blacksmith or machine shop worked into the soil for

plants, will add greatly also to the rich and bright color of the flowers.

Solid Iron Columns.—Solid iron columns are stronger than hollow iron columns of the same diameter; but the same weight of metal that is contained in the solid column, if it were put into the form of a hollow column, would be much stronger than the solid column.

Solder for Brazing Steel.—Very useful in case of a valve-stem or other light portion breaking when it is important that the engine should continue work for some time longer: Silver, nineteen parts; copper, one part; brass, two parts. If practicable, charcoal dust should be strewed over the melted metal of the crucible.

Soot—a good fertilizer.—Save the soot that falls from the chimneys when the latter are cleaned. Twelve quarts of soot to a hogshead of water makes good liquid manure, to be applied to the roots of plants, or a less quantity in the proportion of a pint of soot to a pailful of water will make a liquid manure of the greatest value for flower-beds and plants of all kinds.

Sore Mouth in a Horse.—If caused by ragged teeth, they should be filed off. If nothing of the kind is found, sponge the mouth with a strong decoction of sage leaves, in which alum is dissolved. A few applications of this will probably be effective. It might be advisable to feed the mare upon cut hay or fodder moistened and mixed with bran and meal, a little linseed-meal being given as a gentle laxative.

Sores (Old)—treatment.—Strict cleanliness, normal bowels, and vegetable alteratives are the only curative measures.

Sore Throat—remedy for.—"Simple, cheap, and sure," is the verdict of one who has tried the following remedy for a sore throat: The necessary drugs are an ounce of camphorated oil and five cents worth of chlorate of potash. Whenever any soreness appears in the throat, put the potash in half a tumbler of water, and with it gargle the throat thoroughly; then rub the neck thoroughly with the camphorated oil at night before going to bed, and also pin around the throat a small strip of woolen flannel.

Soup (Bean).—Put a quart of dried white beans soaking the night before you make this soup, which should be put on to boil soon after breakfast the ensuing forenoon. Take two pounds of fresh beef, cut it in pieces, and put them with the bones belonging to them, and a pound of bacon cut fine, into your soup pot. Season with pepper only, and pour on three quarts of soft water. When it boils, remove the scum, and put in the beans. Then boil slowly until the meat is cooked into shreds and the beans are all in fragments, after which strain through a colander into the tureen, season with salt and sauce, and add small squares of toasted bread.

Soup Made of Boiled Codfish.—Remove the skin and bones from cold boiled codfish, and rub it through a very fine colander or a wire sieve with a potato masher; one cupful will be sufficient for two quarts of soup. Put two tablespoonfuls each of flour and butter in a saucepan, set it over the fire, and stir with a wooden paddle until the

flour and butter are smoothly blended; gradually add one quart each of boiling water and milk, stirring all the time until the mixture is free from lumps and reaches the boiling point; then stir in the fish, season the soup palatably with salt, pepper and grated nutmeg, using about two teaspoonfuls of salt and quarter of a teaspoonful of grated nutmeg. Let the soup boil gently for a couple of minutes and then serve it. If it stands before serving long enough to grow thicker than rich cream, use a little hot milk to thin it. Any cold fish may be used in the same way.

Soup (Cod's Head.)—Take a cod's head; wash it well, and put it on to boil with cold water and a little salt. When sufficiently boiled, take it out and cut off all the eatable parts of the head and set them aside. Return the bones and trimmings into the pan and boil them for at least an hour; then strain the soup through a colander to keep out the bones, and put it again into the pan. Take a pint of milk and stir it into a cupful of flour until quite smooth; add this to the soup while boiling and stir it well. Then add a small piece of butter and the pieces of fish that were cut off. Season with salt and white pepper to taste, and boil all together slowly for about ten minutes. A little minced parsley is a great improvement. This is a most delicious and nourishing soup.

Soup (Cracker)—for invalids.—Pour very hot milk over a bowl of crackers, season with butter, salt and pepper.

Soup for Invalids.—Raw beef, on account of its ready digestibility, is often prescribed for invalids. Of late, European physicians have found the use of what we may call raw soup of great utility when given to patients much reduced by fevers. This soup, first proposed by Liebig, is made from finely chopped beef or fowl, recently killed. Half a pound of this meet is added to a pint and a half of distilled water (pure rain water, filtered, will answer), four drops of pure muriatic acid are added, and a teaspoonful of salt, or enough to suit the taste. After standing an hour, the whole is thrown upon a hair sieve (a flannel bag will do as well) to separate the liquid. If the first liquid which passes through is muddy, it is poured back into the strainer until what runs off is quite clear. When the liquid ceases to run, half a pint of water is added, in small quantities at a time, to the flesh in the strainer. The yield will be about a pint of a reddish colored liquid, tasting like soup, which is to be given cold, a cupful at a time, or in such quantities as the patient desires. It is claimed that this soup contains the nutritive principles of the meat not changed by heat, as they are in cooking, and that they are in part ready digested by the muriatic acid, and that it is suited to the weakest digestive organs. If the red color and somewhat fleshy odor are objected to, the one may be disguised by caramel (burnt sugar) and the other by a little wine. The soup spoils readily, and in warm weather must be kept on ice.

Soup (Macaroni).—Four quarts of cold water, three pounds of coarse, lean beef (cut into thin slips), two or three pounds of bones

(broken small), four onions (sliced), one bunch sweet herbs (chopped), tomato juice or catsup, one-half pound of macaroni, a few salt pork bones. Fry the meat until half done, in a very little drippings. Take it out and fry the onions and bones in the same gravy. Put all into a soup-kettle with the herbs, and cover with four quarts of cold water. Bring to a slow boil, and at the end of four hours strain into a great bowl to cool, in order that the fat may rise and be taken off. Meanwhile, make ready your macaroni by breaking it into short bits, covering well with boiling water, a little salted, and stewing slowly twenty minutes, or until tender. Add a lump of butter the size of a walnut; let it stand, covered, for a few minutes, while you season the soup, adding the tomato juice or catsup. Boil, skim, and thicken with a tablespoonful of corn starch wet with cold water. When it is again on the boil, turn in the macaroni, taking care not to break it. Heat to scalding, but do not boil; pour out, and serve.

Soup (Milk).—Wash, pare, slice and parboil one pound of potatoes, pour away the water; skin and scald two onions, chop them, place the potatoes, onions, one teaspoonful of salt and half a teaspoonful of pepper in a stew-pan, with one quart of cold water; bring to a boil, and boil till quite soft (about half an hour); crush the potatoes and onions with a spoon till smooth, add one quart of new milk and one ounce of crushed sago; stir continually till it boils, then boil for ten minutes. This soup may be made richer by adding one ounce of butter or drippings to the quart of cold water; also, by putting a yolk of an egg, well beaten, into the tureen, and mixing the cooked soup slowly with it. The soup must be off the boil or the egg will curdle

Soup (Noodle).—One even pint cup of flour, two eggs, no salt, and water enough to make a stiff dough. Mix well; divide the dough in three equal parts; roll each piece until about a sixteenth part of an inch thick; place on a table covered with a cloth to dry. When dried sufficient to prevent sticking together, cut into strips three inches wide, place them on top of each other; then with a sharp knife shave into strips an eight of an inch wide; toss them with the hands until each strip is separate. Have ready three quarts of good, rich beef or chicken broth boiling, stir the broth while you scatter in the noodles, let them come to a boil when the noodles will come to the surface, remove from the fire, season with pepper and salt and serve.

Soup (Cream Noodle).—Stir the above quantity of noodles into boiling water, instead of broth; have ready an egg well beaten, stirred into a pint of thick, sweet cream; stir this into the noodles, remove from the fire, season as before and serve immediately. Noodles must never boil after coming to the surface.

Soup (Oyster).—To each dozen or dish of oysters, put one-half pint of water; milk, one gill; butter, one-half ounce; powdered crackers to thicken; bring the oysters and water to a boil, then add

the other ingredients previously mixed together, and boil from three to five minutes only. Season with pepper and salt to taste.

Soup (Pea).—Beef, five pounds; water, five quarts, six large carrots, six good turnips, three large onions, salt sufficient; put it on a good slow fire, let it boil three hours; then strain all the broth from the meat and vegetables, and then add three pounds of split peas to the broth; set it on a slow fire two hours, stirring often, so that all the peas will dissolve; take one pound fresh sausage meat, fried to a crisp and fried bread crumbs; put all together, add a few fine herbs, and serve hot.

Soup (Poultry).—Take the carcass and bones of any poultry—turkey particularly—and put in a kettle with plenty of water, and boil all the forenoon, filling up with hot water if necessary, and at dinner time you will find to your surprise a most savory soup; season with salt and pepper.

Soup (Tomato).— One can (pint) canned tomatoes. One pint water, boil twenty minutes; then add one pint milk very gradually so as not to curdle, season as for oyster soup, and serve with crackers or toast bread.

Southern Moss—care of.—Ladies possessing baskets of the beautiful trailing Southern moss from the swamps of South Carolina and Georgia, will be glad to know that it is advisable to occasionally place it in a pail of water, at blood heat, letting it stand for some hours, then squeezing it out and hanging it over chairs to dry, before replacing it in its former decorative positions. This serves to keep it alive and in good condition. When the warm weather sets in, hang it out on trees or shrubs, if you have them; if not, hang on the baskets, or make trellises for it in your shadiest corners. It will not only grow, but under ordinarily favorable circumstances will flower—the flowers very much resembling cloves.

Spavin and Ring-bone—Cure.—Venice turpentine and Spanish flies, of each, two ounces; euphorbium and acqua ammonia, of each one ounce; red precipitate, one-half ounce; lard, one and a half pounds. Pulverize all, and put into the lard; simmer slowly over coals, not scorching or burning, and pour off, free of sediment. For ring-bones, cut off the hair, and rub the ointment well into the lumps once in forty-eight hours. For spavins, once in twenty-four hours for three mornings. Wash well previous to each application with suds, rubbing over the place with a smooth stick, to squeeze out a thick, yellow matter. This has removed very large ring-bones.

Spectacle Glasses—to determine the exact focal distance.—Place the end of a measure of thirty or forty inches in length against a smooth wall, or other suitable ground, in plain view of some well-defined object a few rods distant, as, for instance, a building or window on the opposite side of the street. Then place the edge of your lens on the measure, and move it backward or forward until a spectrum is formed, or, in other words,, until a clear and distinct outline of the distant object is produced on the ground against which your

measure rests. This point will represent sufficiently near, for all practical purposes, the exact focal distance of the lens, and will correspond in inches with the number on all properly marked convex spectacles.

For mending fine steel spectacle frames, use the best gold solder in preference to silver or brass solder.

Spectacle Wipers.—This is something the little ones can make for grandpa or uncle. Cut out of soft chamois leather, two perfectly round pieces an inch and a half across, bind the edges neatly with narrow ribbon, and fasten them together at the side with a bow.

Spice-mill—to clean.—If you wish to clean your spice-mill, grind a handful of raw rice through it. The particles of spice or pepper or of coffee will not adhere to it after this rice is ground through.

Spirits—depression of.—This distressing state may depend on excessive exhaustion of nervous power, from anxiety, disappointment, or undue mental exertion. It may also originate in bilious affection or derangement of the general health, and these little causes often enter into combination with those first mentioned.

Treatment.—The first thing is to turn the attention and thoughts from those objects and channels which have proved prejudicial; then endeavor to brace up the nerves, and gain tone for the general system by exercise on horseback or on foot, by regulated diet and early hours. Indolence and luxurious living should be avoided, active employment should be resorted to, and the mind engaged in some pursuit which will afford interest as well as employment. With regard to medical treatment, the state of the bowels must be attended to, which, in these cases, are often torpid and inactive. To remedy this, the following should be taken: Extract of aloes, thirty grains; castile soap, twenty grains; oil of cloves, three drops, mix; divide into twelve pills, and take one or two for a dose, according to circumstances; or powdered aloes and powdered gum guaiacum, of each forty grains; powdered camphor, fifteen grains; extract of henbane, half a dram; mix, and divide into thirty pills, two to be taken when required. The diet should be nutritious and somewhat generous; meat may be eaten twice a day, and a moderate amount of stimulating fluids taken. Tea and coffee in excess should be avoided.

Sponge—to bleach.—Wash first in weak muriatic acid, then in cold water; soak in weak sulphuric acid, wash in water again, and finally rinse in rose-water.

Sponges—to cleanse.—Sponges can be cleansed by washing them in ammonia and water (use the proportion of a teaspoonful to two quarts) and afterward in a solution of muriatic acid; one part acid to twenty-five parts water. Sponges are not kept clean without care. They should be thoroughly rinsed, then aired and dried after every using, and unless they can be kept thus scrupulously neat they should be banished. For our own use a small piece of Turkish toweling or a neatly hemmed piece of old table-cloth, which can go through the regular laundry process, seems neater. Buttermilk is excellent for

cleaning sponges. Steep the sponge in the milk for some hours, then squeeze it out and wash it in cold water. Lemon juice is also good.

Spots and Stains—to remove from clothing.—Benzine is undoubtedly by far the best and cheapest substance for removing grease, resin, stearine, paraffine, tar, wagon-grease, etc., the purest kind to be applied to the more delicate fabrics. Such spots are often complicated by the adhesion of dust or other matters, which, even if insoluble themselves, readily fall off when the substance with which they are combined is removed. For spots of oil it is best to add a little alcohol ether. Silver spots and indelible ink can be removed, even after a long time, by means of cyanide of potassium or iodide of potassium applied in a concentrated solution. Rust spots can be made to disappear by treatment with a weak solution composed of one part nitric acid and twenty-five of water, and afterward rinsing with water and ammonia; copper spots by diluted sulphuric acid and ammonia, and subsequently with water and ammonia. Spots of paint, when not soluble in water and alcohol, can almost always be removed by oil of turpentine. For complete removal it is necessary to wash the spot afterward in a good deal of turpentine. Fruit, wine, and similar spots are to be treated by sulphurous acid, which may be replaced sometimes, but not always, by chlorine. The acid may be applied either in the form of gas or dissolved in water; in the first case the substance to be treated is to be stretched at the proper height over burning sulphur, and in the latter moistened with the solution and then washed with pure water. For fine white table-cloths the dilute acid is preferable.

Sprained Ankle or Wrist.—Wash the ankle very frequently with cold salt and water, which is far better than warm vinegar or decoctions of herbs. Keep the foot as cool as possible to prevent inflammation, and sit with it elevated on a high cushion. Live on low diet, and take every day some cooling medicine, such as Epsom salts. It cures in a few days.

Sprains—treatment of.—1. Sprains are always promptly relieved by allowing the coldest water to fall upon the part steadily, until no discomfort is experienced. Repeat as often as necessary. Keep the sprained joint elevated, if about the hands, and horizontal if about the feet, so as to promote the flow of blood from the parts by gravity, and live for a few days on fruits and coarse bread mainly.

2. In case of a sprain or a bruise, after it has been well bathed with extremely hot water, the extract of witch-hazel heated, poured on flannel, and bound on the part will relieve the pain as quickly as if it really contained magical properties.

3. The white of an egg, into which a piece of alum about the size of a walnut has been stewed until it forms a jelly, is a capital remedy for sprains. It should be laid over the sprain upon a piece of lint, and be changed as it becomes dry.

4. Rub sprains, bruises, and lameness with a paste made of salt and the white of an egg.

Springs—how to form.—The finest spring can be made by boring, which is performed by forcing an iron rod into the earth by its own weight, turning it round, and forcing it up and down by a spring-pole contrivance. The water will sometimes spout up several feet above the surface. Iron pipes are put down in the hole after the water is found. Depressed situations, having a southern exposure, with rising ground toward the north, are the best situations in which to find water.

Sprinkle—for bookbinders' use.— RED.—Brazilwood (ground), four parts; alum, one part; vinegar, four parts; water, four parts. Boil until reduced to seven parts, then add a quantity of loaf sugar and gum; bottle for use.

BLUE.—Strong sulphuric acid, eight ounces; Spanish indigo, powdered, two ounces; mix in a bottle that will hold a quart, and place it in a warm bath to promote solution. For use, dilute a little to the required color in a teacup.

BLACK.—No better black can be procured than that made by the recipe for edge blacking, in this work, which see.

ORANGE COLOR.—Ground Brazilwood, sixteen parts; annato, four parts; alum, sugar, and gum arabic, each one part; water, seventy parts; boil, strain, and bottle.

PURPLE.—Logwood chips, four parts; powdered alum, one part; soft water, twenty-four parts; boil until reduced to sixteen parts, and bottle for use.

GREEN.—French berries, one part; soft water, eight parts. Boil, and add a little powdered alum, then bring it to the required shade of green, by adding liquid blue.

BROWN.—Logwood chips, one part; annatto, one part; boil in water, six parts; if too light add a piece of copperas the size of a pea.

Squinting.—Squinting frequently arises from the unequal strength of the eyes, the weaker eye being turned away from the object to avoid the fatigue of exertion. Cases of squinting of long standing have often been cured by covering the stronger eye, and thereby compelling the weaker one to exertion.

Stale Bread—to utilize.—Stale bread may be utilized in making a good breakfast dish. Cut it in thin slices, and, when toasted uniformly brown, spread it with butter, and heap on each slice some ham, minced and mixed with eggs, and fried nicely. Serve very hot.

Stains—how to remove.—The stains easiest to remove are those of sugar, gelatine, blood and albumen; a simple washing with water is all that is necessary for all kinds of fabrics.

Grease spots: For white linen or cotton goods, use soap or weak lyes.

For colored calicoes, warm soap-suds.

For woolens, soap-suds or ammonia.

For silks, benzine, ether, ammonia, magnesia, chalk, yolk of egg with water.

Paint, varnish and resin stains: For white or colored cotton and

woolen goods, oil of turpentine and benzine, followed by soap-suds.

For silk, benzine, ether, soap; hard rubbing is to be avoided.

Stearine, sperm candle stains: For all kinds, use ninety-five per cent. alcohol.

Wine and fruit stains: White cotton or linen, fumes of burning sulphur, warm chlorine water.

Colored cottons or woolens: Wash with tepid soap-suds or ammonia.

Silks: The same, with very gentle rubbing.

Rust, nutgall ink stains: White cottons and linens, warm solution of oxalic acid, dilute muriatic acid followed by granulated tin.

Colored cottons and woolens: Repeated washings with a solution of citric acid, if the color is fast.

Silks: Do nothing; all attempts only make things worse.

Lime, lye, alkali stains: White cottons and linens, wash with cold water.

Colored goods and silks: A weak solution of citric acid applied with the tip of the finger to the spot, previously moistened with water.

Acids, vinegar, orange-juice, etc., stains: White cottons and linens, wash with pure water or warm chlorine water.

Colored goods or silks: Ammonia, diluted according to the fineness of the tissue and the delicacy of the color.

Tannin, walnut shell stains: White cotton and linens, javelle water, warm chlorine water, concentrated solution of tartaric acid.

Colored goods or silks. Chlorine water diluted according to the tissue and its color, each application to be followed by washing with water.

Tar and Axle Grease Stains.—White cottons and linens. Soap, oil of turpentine, and water, each applied in turns.

Colored cottons and woolens: First smear with lard, rub with soap and water, and let stand a short time; then wash with oil of turpentine and water, alternately.

Silks: The same, using benzine instead of turpentine, and dropping the water from a certain height on the under side of the stain. Avoid rubbing.

Stains of Dye to Remove from the Hands.—Take a small quantity of oil of vitriol, and pour it into some cold water in a wash-hand-basin, and wash your hands in it without soap; the dye will then come off. Afterward cleanse them completely in hot soap and water, taking care that all the acid is washed away before the soap is applied. If the vitriol water is not made very strong, it will not injure the most delicate hands, nor leave any red or coarse appearance.

Stains—to remove from the hands.—Dampen the hands first in water, then rub them with tartaric acid or salt of lemons, as you would with soap; rinse them and rub them dry. Tartaric acid or salt of lemons will quickly remove stains from white muslins or lin-

ens. Put less than half a teaspoonful of water; wet the stain with it, and lay it in the sun for an hour; wet it once or twice with cold water during the time; if this does not quite remove it, repeat the acid water, and lay in the sun.

Stains (Fruit)—to remove from linen.—1. Moisten the stained places with a little water; then hold them over a lighted brimstone match in such a way that they catch the fumes without burning. The stains will yield to the fumes, and may be washed out. Avoid soap before the remedy is applied.

2. Hot, sweet milk will also remove fruit stains if used before soap is applied.

3. To take out stains of acids, fruits, etc., rub the place each side with yellow soap, then lay on a paste of starch made with cold water; rub it in, and bleach the linen in the sun till the stain comes out. Scorches may be removed from linen by spreading over them the following mixture: Juice pressed from two onions, half an ounce of white soap, two ounces of fuller's earth, and half a pint of vinegar; mix and boil well. Let it get cold before using it.

Stains of Ink on Books and Engravings.—They may be removed by applying a solution of oxalic acid, citric acid, or tartaric acid, upon the paper without fear of damage. These acids take out writing-ink, but do not interfere with the printing.

Stains (Ink)—to remove.—Ink-stains in cotton or linen can often be removed by washing in salt and water; while wet they can be taken out with vinegar or milk, without injury to color, or fabric; but either of these methods must be employed before the fabric is washed with soap, or even wet with water.

Stained Hands.—1. Never attempt to wash stains, from whatever cause they may arise, from off the hands by using soap and water. In nine cases out of ten this will only serve to set the stains and lengthen the time of their disappearance. Salt of lemons is the best thing to use if you have it near you; if not, common salt. Use either of these as you would common soap. If, after this, the hands are not sufficiently white, wash them in horseradish and milk.

2. The removal of walnut stains from the hands may be accomplished simply by rubbing with slices of apple or of pear; the cleansing power being done, it is supposed, to the presence of the acid, which therefore may, perhaps, be advantageously replaced by citric acid or lemon-juice. If, however, the stains be at once thoroughly washed in fresh water, without using soap, they may be made to disappear almost entirely; but soap is unadvisable, since its alkali acts as a mordant, and fixes the color.

Stains and Grease—to remove from a carpet.—A mixture which is excellent for removing grease spots and stains from carpet and clothing is made from two ounces of ammonia, two ounces of white castile soap, one ounce of glycerine, one ounce of ether; cut the soap fine, dissolve in one pint of water over the fire; add two quarts of water. This should be mixed with water in the proportion of a tea-

cupful to one ordinary sized pail of water. Mix thoroughly, and wash soiled garments in it. For removing spots use a sponge or clean flannel cloth, and with a cloth rub as dry as possible. Woolen goods may be made to look bright and fresh by being sponged with this.

Stains (Milk and Coffee)—to remove.—These stains are very difficult to remove, especially from light colored and finely finished goods. From woolen and mixed fabrics they are taken out by moistening them with a mixture of one part glycerine, nine parts water, and one-half part aqua ammonia. This mixture is applied to the goods by means of a brush, and allowed to remain for twelve hours (occasionally renewing the moistening). After this time, the stained pieces are pressed between cloth, and then rubbed with a clean rag. Drying, and, if possible, a little steaming, is generally sufficient to thoroughly remove the stains. Stains on silk garments which are dyed with delicate colors, or finely finished, are more difficult to remove. In this case five parts glycerine are mixed with five parts water, and one-quarter part ammonia added. Before using this mixture it should be tried on some part of the garment where it cannot be noticed, in order to see if the mixture will change color. If such be the case, no ammonia should be added. If, on the contrary, no change takes place, or if, after drying, the original color is restored, the above mixture is applied with a soft brush, allowing it to remain on the stains for six or eight hours, and is then rubbed with a clean cloth. The remaining dry substance is then carefully taken off by means of a knife. The injured places are now brushed over with clean water, pressed between cloths, and dried. If the stain is not then removed, a rubbing with dry bread will easily take it off. To restore the finish, a thin solution of gum arabic, or in many cases beer is preferred, is brushed on, then dried, and carefully ironed. By careful manipulation these stains will be successfully removed.

Stains from Mourning Dresses.—Boil a handful of fig leaves in two quarts of water until reduced to a pint. Bombazines, scrape, cloth, need only be rubbed with a sponge dipped in the liquor, and the effect will be instantly produced.

Stains—to remove.—Boiling water will remove tea stains and many iron stains. Pour the water through the stain and thus prevent it from spreading over the fabric, while soaking it in milk before washing will always remove ink stains from any fabric.

Stains (Oil)—to remove.—To take oil stains out of white cloth, make a strong solution of borax water—one tablespoonful powdered borax to a pint of boiling water; place the cloth on a clean board or table, and rub the stains well, using a clean brush dipped into the solution; if the spots are of long standing a very little soap may be used with the borax water, using the brush for that purpose; then rub dry with a clean, soft cloth.

Stains from Silk.—Mix together in a phial two ounces of essence of lemon and one ounce of oil of turpentine. Grease and

other spots in silk are to be rubbed gently with a linen rag dipped in this mixture.

Stains on Silver-plate—to remove.—It frequently happens that, from long neglect, plate becomes so stained and spotted that it cannot be immediately restored by any of the usual plate-powders. Whenever this occurs, mix one part of sal ammoniac with sixteen parts of vinegar. Rub the stains or spots gently with the mixture; they will soon disappear. The plate should then be well washed in soap and water

Stair Carpets—how to lay.—To save your stair carpets from wearing out at the edge, they should always have a strip of paper put under them at and over the edge of every stair which is the part where they first wear out, in order to lessen the friction of the carpet against the boards beneath. The strips should be within an inch or two as long as the carpet is wide, and about four or five inches in breadth, so as to lie a distance from each stair.

Stammering—cure for.—1. Where there is no malformation of the organs of articulation, stammering may be remedied by reading aloud with the teeth closed. This should be practised for two hours a day, for three or four months. The advocate of this simple remedy says, "I can speak with certainty of its utility."

2. A simple, easy, and effectual cure of stammering. It is, simply, at every syllable pronounced, to tap at the same time with the finger; by so doing, the most inveterate stammerer will be surprised to find that he can pronounce quite fluently, and, by long and constant practice, he will pronounce perfectly well.

3. Mr. J. E. Suitterlin has for eight years conducted an institute in New York for the cure of stuttering and stammering with most satisfactory success. His system is philosopical and simple, and is based on the plainest common-sense principles. Excluding reliance on medical aid, it comprises chiefly careful drill of the vocal organs, and such mental discipline as will contribute to the object. In the first stage of treatment the subject is not permitted to talk, except to practice his exercises, and to make such movements in speech as can be guided and observed by the teacher. During this time he is taught to consider himself not a patient, but a student of speech. In the second stage, which is begun when enough has been done in the first, the pupil is encouraged to talk for practice at every opportunity with a "legato" movement (as in music) and a strong accent. In the third stage he is allowed to talk more naturally, but in a studied manner, and in the fourth stage he is permitted to employ his normal way of speaking, but is by this time relieved from the impediment under which he formerly suffered. The psychic part of the treatment, which aims to divert the pupil's mind from himself and his troubles, is the most difficult, and at the same time the most essential part. The time required for success depends very largely, and, in fact chiefly, on the mental constitution of the subject.

From this brief description of an effective method of treatment the

parent may gather the useful hint that to remedy any incipient tendency in his child to stammer he should exercise a mild and kind but firm ruling, suppress all irritability of temper, observe for the child all the laws of health, and be careful as to his own manner of talking and the patterns he may set for the child. The statistics collected and preserved by Mr. Suitterlin show that the stammering habit is contracted, with only very rare exceptions, between infancy and ten years of age.

Starch—for doing up dresses.—For starching muslins, ginghams and calicoes, dissolve a piece of alum the size of a shellbark for every pint of starch and add to it. By so doing the colors will keep bright for a long time, which is very desirable when dresses must be often washed, and the cost is but a trifle.

Starching Shirt Collars.—Make some gum water of the whitest and cleanest gum arabic, keep it in a bottle, and whenever collars are to be starched, work a little of this gum water and also a little common soda into the starch. This will give an extreme stiffness and a beautiful gloss to the collars.

Starch—to clear.—To prevent starch from sticking, boil it, according to quantity, from half an hour to an hour in a stone milk crock, and it will not burn, and will become very clear and will starch linen beautifully.

Starch—for paste.—Starch makes a better paste to use in papering walls than flour, and is less expensive also, a little will go so much further.

Starch Polish.—A piece of stearine candle, spermaceti or white wax as large as a robin's egg will give a nice gloss. A teaspoonful of salt to each pint of starch prevents sticking.

Starched Clothes—to render less inflammable.—If a solution of sal ammonia and gypsum be added to the starch used in doing up linen or cotton clothing these become considerably less inflammable, though not rendered incombustible.

Steel Goods—to preserve from rust.—After bright grates have been thoroughly cleaned, they should be dusted over with unslaked lime, and thus left until wanted. All the coils of piano wires are thus sprinkled, and will keep from rust for many years. Table-knives which are not in constant use ought to be put in a case in which sifted quicklime is placed about eight inches deep. They should be plunged to the top of the blades, but the lime should not touch the handles.

Steel—to remove bluing from.—Immerse in a pickle composed of equal parts muriatic acid and elixir vitriol. Rinse in pure water and dry in tissue paper.

Steel—way of scaling.—The scales on steel articles can be removed by pickling in water with a little sulpuric acid in it, and when the scale is loosened, brushing with sand and a stiff brush.

Steel (Burnt)—to restore.—Borax, three ounces; sal-ammoniac; eight ounces; prussiate of potash, three ounces; blue clay, two ounces

resin, one and a half pounds; water, one gill; alcohol, one gill. Put all on a fire and simmer till it dries to a powder. The steel is to be heated and dipped into this powder, and afterward hammered.

Steel—to toughen.—Resin, two pounds; tallow, two pounds; black pitch, one pound; melt together, and dip the steel in when hot.

Steel—to remove rust from.—Cover the steel with sweet oil, well rubbed in. In forty-eight hours rub with finely powdered, unslaked lime until the rust disappears.

Steel—to polish.—Take crocus of oxide of tin and graduate it in the same way as in preparing diamond dust, and apply it to the steel by means of a piece of soft iron or bell metal, made in proper form, and prepared with flour of emery, same as for pivot burnishers; use the coarsest of the crocus first, and finish off with the finest. To iron or soft steel a better finish may be given by burnishing than can be imparted by the use of polishing powder of any kind whatever. The German method of polishing steel is performed by the use of crocus on a buff wheel. Nothing can exceed the surpassing beauty imparted to steel, or even cast-iron, by this process.

Stew (Chicken).—Boil a chicken until tender; remove and chop fine; have ready a deep dish; put in the pieces of chicken with the liver, in layers, with salt, pepper and butter; make a gravy with the liquor; pour over the chicken and cover with a suet crust.

Stew (Irish)—economical.—After the best end of a neck of mutton has been used for roast or cutlets, take the scrag and cut it up, and the ends of the cutlets cut up in small pieces; the bones must not be broken. Put one pound of meat to two pounds of good old potatoes peeled and cut in pieces, onions, pepper, and salt, and a little water in a covered saucepan. When half done, add a few whole potatoes, and by the time these are quite cooked all the water should be absorbed, and the ingredients well amalgamated and no gravy apparent. It is best served in a deep dish.

Stings—remedies for.—1. The following is a cure for bee stings: Take a pinch in the fingers of common table salt, put on the place stung and dissolve with water, rub with the finger. If not relieved in one minute, wet the place with aqua ammonia.

2. For bites and stings, apply instantly, with a soft rag, most freely, spirits of hartshorn.

3. A lump of wet saleratus applied to the spot stung by a wasp will afford instant relief. The alkaline property neutralizes the poison.

4. A bruised leaf of the common poppy applied to the stings will give immediate relief.

Stings—treatment of.—The pain caused by the sting of a plant or insect is the result of a certain amount of poison injected into the blood. The first thing to be done is to press the tube of a small key firmly on the wound, moving the key from side to side to facilitate the expulsion of the sting and its accompanying poison. The sting, if left in the wound, should be carefully extracted, otherwise it will

greatly increase the local irritation. The poison of stings being acid, common sense points to the alkalies as the proper means of cure. Among the most easily procured remedies may be mentioned soft soap, liquid of ammonia (spirits of hartshorn), smelling salts, washing soda, quicklime made into a paste with water, lime water, the juice of an onion, tobacco juice, chewed tobacco, bruised dock leaves, tomato juice, wood ashes, tobacco ash, and carbonate of soda. If the sting be severe, rest and coolness should be added to the other remedies, more especially in the case of nervous subjects. Nothing is so apt to make the poison active as heat, and nothing favors its activity less than cold. Let the body be kept cool and at rest and the activity of the poison will be reduced to a minimum. Any active exertion whereby the circulation is quickened will increase both pain and swelling. If the swelling be severe the part may be rubbed with sweet oil or a drop or two of laudanum. Stings in the eye, ear, mouth or throat sometimes lead to bad consequences; in such cases medical advice should always be sought for as soon as possible.

Stiff Neck—treatment.—Warmed molasses and mustard make a good plaster for stiff neck.

Stocking Supporters.—When buying elastic ribbon for children's stocking supporters, procure a fine-webbed brand; one pair of these will outwear several of the cheaper ones. Do not put button holes in the elastic; but hem the ends and sew on loops of narrow white tape. Make the supporters long enough for the shortest stockings, and add a couple of loops of tape two inches apart on the upper end for use with longer hose. If at any time it is necessary to allow the supporters to encircle the leg, procure the ribbon with fluted edges, as that is much more elastic than any other kind, and will offer less hindrance to circulation.

Stockings (Faded)—to restore.—Pale blue stockings which have faded can have the color restored by dipping into hot water in which common bluing has been poured and some lumps of alum are dissolved. Old white stockings can be colored in this way and do a good deal of service.

Stockings—to make durable.—Before the children's stockings begin to be thin at the knees and to need mending, put a piece of cloth under and sew with fine stitches so that they will not show; soft flannel or pieces of old stockings which are strong enough to be worth using are better than any heavier cloth. By taking the trouble to do this, stockings may be made to last twice as long as without.

Stomach (Weak)—to make strong.—The treatment consists in taking no other nourishment than yolks of eggs beaten up with the flour of potatoes and water. Its efficacy, however, in cases of debility cannot be questioned, and the following is the mode of preparing this valuable article of food as recommended by Sir John Sinclair: Beat up an egg in a bowl and then add six tablespoonfuls of cold water, mixing the whole well together; then add two tablespoonfuls of the farina of potatoes; let it be thoroughly mixed with

the liquor in the bowl. Then pour in as much boiling water as will convert the whole into a jelly and mix it well. It may be taken either alone or with the addition of a little milk; in cases of stomachic debility or consumptive disorders, at the other meals. The dish is light and easily digested, extremely wholesome and nourishing. Bread or biscuit may be taken with it as the stomach gets stronger.

Stomach Sickness Relieved.—Salts of tartar, thirty grains; oil of mint, six drops; powdered gum arabic, one-eighth of an ounce; powdered loaf-sugar, one-eighth of an ounce; water, six ounces. A tablespoonful of the mixture is a dose.

Stones (Large)—to manage.—A trench is dug around the stone, and in this a fire is built of any rubbish or trash at hand. Our correspondent says that the heat opens the seams in the stone and it may be easily broken apart into pieces suitable for use in building, etc.

Stoppers (Glass)—to loosen.—Loosen ground glass stoppers by wrapping around the neck of the bottle a thick rag wet with hot water. Remove the stopper before the heat reaches and expands it. If sticky, drop a little camphene between the neck and stopper.

Stoves—to black.—The fine polish given stoves by those skilled in the art is produced as follows: Have a thin mixture of black varnish and turpentine; apply this with a paint or varnish brush to a portion of the stove; then with a cloth dust this over with pulverized British luster or stove polish; then rub with a dry brush. The stove must be perfectly cold. The stove dealers buy the pulverized stove polish, which is carburet of iron, in twenty-five pound packages. The process conducted in this manner is quite brief, but gives beautiful results.

Stoves—care of.—1. When taken down they should be thoroughly cleaned, both inside and out, and if a new lining or other repairs are needed, now is the time to attend to this. Go over the outside of both stove and pipe with common stove polish, which is plumbago or black lead, and avoid all kinds of varnish. The use of the polish, thoroughly rubbed on with a brush, is not for appearance merely, but it forms a thin film over the iron and prevents it from becoming rusty. The pipe should have all loose dust knocked out, and if it is necessary to separate the joints first mark them with chalk in such a manner that they can be readily put together again. Much of the proverbial annoyance in putting up a stove is due to a neglect of this simple precaution. All loose parts, including legs, should be wrapped in coarse paper, and placed inside of the stove before it is put away, not forgetting the poker, handles, and whatever else belong to it. Stoves should always be stored in a dry, tight place, where water cannot accidentally reach them. It is a useful precaution to wrap them in old bagging, or even newspapers.

2. When sheet-iron stoves and pipe are taken down in the spring, first clean all soot and ashes from every part as completely as possible and have them perfectly dry. Dip a soft cotton or woolen cloth in kerosene oil and rub over the whole outside surface; then with

another dry cloth wipe over the articles again lightly and evenly; then wrap up each piece in newspapers to keep from dust and air, and store away in a dry place for the season. In the fall all that they will need to have them look nice is to rub them over with a dry cloth.

3. You can black a sheet-iron stove just as you do your cook stove, but not when hot. Polish by rubbing after blacking it with a dry newspaper.

4. A tablespoonful of molasses added to stove blacking will cause it to adhere better and retain its polish longer.

5. Rusty stove pipe may be made to look nearly as good as new by rubbing it over with a bit of cloth moistened with sweet oil. By coating the entire pipe, joints which are unlike in appearance will be made uniform and display a nice luster.

6. A teaspoonful of pulverized alum mixed with stove polish will give the stove a fine luster which will be quite permanent.

Strains, etc.—embrocation for.—Half ounce of strongest camphorated spirit, one ounce spirits of turpentine, one raw egg, half pint best vinegar. Well mix the whole, and keep it closely corked. To be rubbed in three or four times a day. For rheumatism in the head, or faceache, rub all over the back of the head and neck, as well as the part which is the immediate seat of pain.

Strawberries—when to plant.—The above question is often asked, and its answer must depend upon circumstances. One fact about the strawberry plant should be known, and this will enable each one to decide for himself. The plants that are sent out by nurserymen are those that were formed last year by the runners from old plants taking root in the soil of the bed. If these are taken up in the usual way and planted in a new bed—it may be after the lapse of several days—they require a whole season to get established and become sufficiently strong to bear a crop. If these plants are set this spring, they will bear a crop next spring; if such plants are set next autumn, they will require all of next season to grow in, and while they may produce here and there a few berries, they will give no real crop until the following year. Growers of fruit for market set a share of their plants in the fall, because then they have leisure and the ground is in excellent condition. If the plants are made to strike root in pots, these in early autumn may be planted in beds without any disturbance of their roots, and will give a fair crop next spring. Such plants are more expensive than others, and if a crop of fruit is wanted next spring, it is better to set out the plants now. Making the rows two feet apart, and setting the plants one foot apart in the row, as a general rule is best.

With regard to protecting strawberry plants, if some light material can be put over the plants that will not smother and rot them, and yet will be just enough to make shade from the winter sun and a screen from frosty winds, it will be doing a good turn to the strawberry plant. Manure is bad. There is salt in it, especially when fresh, which is destructive to foliage; but clean straw, or swamp or

marsh hay that is free from weeds, answers the purpose very well. But it must not be put on very thick. The idea is, just enough to make a thin screen, and yet enough to hold the moisure long. Shade without damp is the idea. Such light protection is good for the strawberry plant.

Strawberries—to make digestible.—The way to make strawberries digestible to those who are unable to eat them on account of dyspepsia or any other cause is very simple. Cover them with a very large allowance of powdered sugar and then squeeze over them one, two or three lemons, according to the quantity. The lemon juice brings out the strawberry flavor more than anything else, and its acidity counteracted by the large quantity of sugar. The lemon juice should be in the same proportion as the cream would be in the place of which it is used.

Strawberry Short Cake.—One quart of flour, two heaping teaspoonfuls of baking powder, one teaspoonful of salt, two tablespoonfuls of sugar sifted together. Add a scant half cup of butter and mix through very thoroughly, then add milk till stiff enough to roll out. Mold only just sufficiently to make smooth, and roll about half an inch thick. Bake in a quick oven, split open lightly, butter well and strew with berries and powdered sugar, making two layers with berries between and on top. We like this better than the real sweet kind. The same may be used with peaches and oranges, which are excellent substitutes for strawberries.

Straw—method of bleaching.—Dip the straw in a solution of oxygenated muriatic acid, saturated with potash. (Oxygenated muriate of lime is much cheaper). The straw is thus rendered very white, and its flexibility is increased.

Straw Hats—to bleach.—Straw hats and bonnets are bleached by putting them, previously washed in pure water, into a box with burning sulphur; the fumes which arise unite with the water on the bonnets, and the sulphurous acid thus formed bleaches them.

Straw Matting and Oilcloth—to clean.—Straw matting may be kept new looking and bright by washing it twice during the season with a warm solution made by dissolving a pint of salt in half a pailful of soft water, the object of the salt being to prevent it from turning yellow. After washing, the matting should be quickly dried with a soft cloth. By wiping oilcloth all over, after being scrubbed and dried, with a cloth dipped in milk, the colors will come out clear and bright, and remain distinct throughout the year. This does not "track off" like oil used for the same purpose.

Stump Machine (Home-made).—Take three pieces of common joints, put them together in form like a common harrow, letting the tapering ends lap by each other some six inches, making a place for the chain to rest in. Cut off the roots at any distance you please from the stump; place the machine at one side of the stump, tapering end up; hitch the chain on the opposite side and pass it over the machine; then hitch a good yoke of oxen thereto, and you will see

the stump rise. Another good method is as follows: In the fall of the year bore a one inch hole eighteen inches deep into the center of the stump, and put in one ounce of saltpeter, filling up with water, and plugging the hole up. In the spring take out the plug, put in half a gill of kerosene and set fire to it. It will burn out the stump to the furthest root. Here is another plan: In the fall, with an inch auger, bore a hole in the center of the stump ten inches deep, and put into it one-half pound of vitriol, and cork the hole up very tight. In the spring the whole stump and roots extending all through their ramifications will be found so rotten that they can easily be eradicated.

Sty in the Eye.—1. Stys are little abscesses which form between the roots of the eyelashes, and are rarely larger than a small pea. The best way to manage them is to bathe them frequently with warm water or warm poppy-water, if very painful. When they have burst, use an ointment composed of one part of citron ointment and four of spermaceti, well rubbed together, and smear along the edge of the eyelid. Give a grain or two of calomel with five or eight grains of rhubarb, according to the age of the child, twice a week. The old-fashioned and apparently absurd practice of rubbing the sty with a ring, is as good and speedy a cure as any process of medicinal application; though the number of times it is rubbed, or the quality of the ring and direction of the strokes, have nothing to do with its success. The pressure and the friction excite the vessels of the part, and cause an absorption of the effused matter under the eyelash. The edge of the nail will answer as well as a ring.

2. Take a fig, cut it once or twice in two, put it in a cup, pour boiling water on it, and let it stand until cool, not cold, then bathe the eye with the water quite frequently. It is sure.

3. Put a teaspoonful of tea in a small bag; pour on it just enough boiling water to moisten it; then put it on the eye pretty warm. Keep it on all night, and in the morning the sty will most likely be gone; if not, a second application is sure to remove it.

Suffocation—to avoid.—To avoid suffocation in a house on fire, steep a handkerchief or towel in water and tie it round the head, covering mouth and nostrils. In that condition, a person will be in a position to breathe freely and walk in the densest smoke to be met with in a burning building.

Sulphur—its properties and uses.—Sublimed sulphur is laxative and diaphoretic. It is used externally in skin cases, especially itch, both in the form of ointment and as a vapor-bath. It is used internally in hæmorrhoids, combined with magnesia, as a laxative for children, and as a diaphoretic in rheumatism. Dose, from one scruple to two drams, mixed in milk or with treacle. When combined with an equal proportion of cream of tartar it acts as a purgative.

Sulphurous Acid—to make.—To twelve ounces of sulphuric acid, in a glass retort, add two ounces of sulphur, and apply a gentle heat. This is a cheap and easy process.

Summer Suits—how to wash.—Summer suits are nearly all made of white or buff linen, pique, cambric, or muslin, and the art of preserving the new appearance after washing is a matter of the greatest importance. Common washerwomen spoil everything with soda, and nothing is more common than to see the delicate tints of lawns and percales turned into dark blotches and muddy streaks by the ignorance and vandalism of a laundress. It is worth while for ladies to pay attention to this, and insist upon having their summer dresses washed according to the directions which they should be prepared to give their laundresses themselves. In the first place, the water should be tepid, the soap should not be allowed to touch the fabric, it should be washed and rinsed quick, turned upon the wrong side and hung in the shade to dry, and when starched (in thin boiled, but not boiling starch) should be folded in sheets or towels and ironed upon the wrong side as soon as possible. But linen should be washed in water in which hay or a quart bag of bran has been boiled. This last will be found to answer for starch as well, and is excellent for print dresses of all kinds, but a handful of salt is very useful also to set the colors of light cambrics and dotted lawns; and a little ox gall will not only set, but brighten yellow and purple tints, and has a good effect upon green.

Sunday Occupation.—The man of business, whose body and mind have alike been taxed during the six working days, ought to sleep an hour or two after his Sunday dinner, if he can. It is surprising how much like a seven day clock the brain will work, if the habit of a "Sunday nap" be once formed. Nature will take advantage of it as regularly and gratefully as she does of the nightly sleep, and do her best to make up lost time. People, on the other hand, whose weekly toil is chiefly physical, may well give their mind activity, while their body is resting. Two sermons and three or four hours of solid reading are a real rest to some on Sunday, while to others such a course amounts to positive Sabbath breaking. Sunday is a day of rest—not a day of work, religious or otherwise; it is a day for repose—not for exhaustion. But what the dogmatists on one side and illiberal liberals on the other are apt to overlook is the fact that all men do not rest alike any more than they labor alike, and what may help to save one will aid in killing another. After the Sunday dinner, then, one should seek rest, innocent recreations, helpful happiness, sleep, or read or go and help instruct and interest a mission school, or visit the sick and suffering, according to your needs and your gifts. In suitable weather, a large portion of the day should be spent out of doors.

Sun-burn—to remove.—Wash the face at night with either sour milk or buttermilk, and in the morning with weak bran tea and a little eau de cologne. This will soften the skin and remove the redness, and will also make it less liable to burn again with exposure to the sun. Bathing the face several times in the day with elder flower water and a few drops of eau de cologne is also very efficacious.

Sun-stroke—rules for the prevention and treatment of.—Sun-stroke is caused by excessive heat, and especially if the weather is "muggy." It is more apt to occur on the second, third or fourth day of a heated term than on the first. Loss of sleep, worry, excitement, close sleeping-rooms, debility, abuse of stimulants, predispose to it. It is more apt to attack those working in the sun, and especially between the hours of eleven o'clock in the forenoon and four o'clock in the afternoon. Have as cool sleeping-rooms as possible. Avoid loss of sleep, and all unnecessary fatigue. If working indoors and where there is artificial heat—laundries, etc.—see that the room is well ventilated. If working in the sun wear a light hat (not black, as it absorbs the heat,) straw, etc., and put inside of it on the head a wet cloth or a large green leaf; frequently lift the hat from the head and see that the cloth is wet. Do not check perspiration, but drink what water you need to keep it up, as perspiration prevents the body from being over-heated.

Have, whenever possible, an additional shade, as a thin umbrella, when walking, a canvas or board cover when working in the sun. When much fatigued do not go to work, especially after eleven o'clock in the morning on very hot days if the work is in the sun. If a feeling of fatigue, dizziness, headache or exhaustion occurs, cease work immediately, lie down in a shady and cool place; apply cool cloths to and pour cold water over the head and on the neck.

If any one is overcome by the heat send immediately for the nearest good physician. While waiting for the physician, give the person cool drinks of water, or cold black tea, or cold coffee, if able to swallow. If the skin is hot and dry, sponge with or pour cold water over the body and limbs, and apply to the head pounded ice wrapped in a towel or other cloth. If there is no ice at hand, keep a cold cloth on the head, and pour cold water on it as on the body. If the person is pale, very faint and pulse feeble, let him inhale ammonia for a few seconds, or give him a teaspoonful of aromatic spirits of ammonia in two tablespoonfuls of water with a little sugar.

Superphosphate of Lime—to make.—Take a large tub, or barrel, and put into it two hundred pounds water; add, very slowly and cautiously, one hundred pounds of pure sulphuric acid; you must be very careful, while handling this article, not to let it touch your skin or clothing, as it will instantly blacken the skin and destroy the clothing, wherever it comes in contact; and, when mixed with water, it engenders a very intense heat. Into this mixture throw two hundred pounds of bones, no matter how old or useless they may be. The sulphuric acid instantly attacks and enters into combination with the bones, reducing them to a pasty consistency, and completely dissolving them. Keep under cover, and turn them over occasionally, while the process is going on; and when completed dump out the whole contents on the barn floor or on a platform of boards, and thoroughly work into the mass four times its bulk of dry bog-earth or dry road-dust; mix and pulverize completely with a wooden shovel.

The bog-earth acts as an absorbent or drier, retaining the fertilizing properties of the compound, and rendering it easy of uniform distribution. If whole bones are used, it will take six or eight weeks to dissolve them; if they are broken with an axe, they will dissolve in about three weeks; if they are ground in a bone mill, four days will be sufficient. This manure is the most powerful fertilizer in existence; and when made by these directions, it is the cheapest, as one ton is equal to thirty-two tons of barnyard manure. For top-dressing grass lands, use three hundred pounds per acre; for corn, potatoes, beans, turnips, etc., apply four hundred and fifty pounds per acre in the drill, mixing with the soil; for wheat, rye, oats, or barley, four hundred pounds per acre, harrow in with the seed; for buckwheat three hundred pounds per acre.

Superphosphate in Twenty-four Hours.—Any farmer who has got an apparatus for steaming food for cattle can make superphosphate in quick style by admitting steam from the boiler into the barrel containing the water, acid and ground bones. The heat thus generated quickens the dissolution of the bones in a wonderful manner; and if the process is properly conducted, it will not take over twenty-four hours in any case. It is indispensable that the barrel be tightly covered to retain the steam.

Superphosphate—substitute for.—If you have inch bone ground in a bone-mill, and cannot afford to purchase the sulphuric acid to work it up into superphosphate of lime, you can reduce your bones into a fine impalpable powder by simply using three barrels of loamy soil to every barrel of inch bones; mix them together. The bones will soon begin to heat and ferment, and continue so for some time; they will then cool off. You will then proceed to chop down and pulverize and work the mass thoroughly; it will begin to reheat and ferment and cool down again; and you will continue working it over till the contents are brought to the proper state of fineness, when you will have a fertilizer of astonishing power.

Swellings and Strains in Horses.—Strong vinegar saturated with common salt, used warm, is good for strains and reducing swellings in horses. One ounce of white vitriol; one ounce of green copperas; two teaspoonfuls of gunpowder, all pulverized together, and dissolved into one quart of soft water, and used cold, rubbing in thoroughly, is one of the best applications known for reducing swellings.

Sweeny—liniment for.—Alcohol and spirits turpentine, of each eight ounces; camphor-gum, pulverized cantharides, and capsicum, of each one ounce; oil of spike, three ounces; mix. Bathe this liniment in with a hot iron, and a cure is sure to follow.

Sweet Corn—to can.—We preserve sweet corn by putting the corn raw into tin cans; then fill with cold water even with the top of the corn; solder up the can, pricking a small hole in the cover; solder that also. Boil the cans and contents in boiling water two and a half hours; then with a hot iron open the small hole and let the gas

blow out, after which solder up and boil again two and a half hours and set away for use. Peas, string beans, and Lima beans can be put up in this manner, and they certainly pay for the trouble of putting up. Every family should have a soldering apparatus, as it would pay for itself in a very short time, and save many trips to the tinner's.

Sweet Corn—to dry.—Have tried putting down sweet corn with salt, and would say to all, do not do it, for when you have washed or cooked it enough to get the salt out there is no goodness in it. I think there is no better way than to take it when just right for eating, first thing in the morning, cut from the cob with a sharp knife, then scrape the cob, being careful not to cut into it at all, or it will spoil the corn by making it taste hard and unpleasant, put on tins and plates in a pretty hot oven, stirring often at first, and as it dries having less fire. By night mine is almost dry enough, and by the next day can be put in bags and hung up for winter use. In winter take what is needed for use, wash in two or three waters, put to soak in clean, when soft enough, cook fifteen minutes in same water, put in cream or milk, and season. It needs to soak four or five hours, or in cold weather can soak all night.

Sweating Drops.—Ipecac, saffron, boneset and camphor gum, of each, three ounces; opium, one ounce; alcohol, two quarts. Let stand two weeks and filter. A teaspoonful in a cup of hot sage or catnip tea every hour until free perspiration is induced; good in colds, fevers, inflammations, etc. Bathe the feet in hot water at the same time.

Sweats—treatment of.—A mixture of three parts salicylic acid and eighty-seven parts silicate of magnesia is said to be not only a remedy for sweating of the feet, but, when rubbed over the whole body, on the authority of Dr. Kohnhom, a cure for night sweating by consumptives.

Sweeping Hints.—In sweeping do not scrub your broom into your carpet as if you were sawing a pine board, but sweep lightly and gently, and you will get the dust together just as well, save making half the dust, besides saving a great deal in the wear of the carpets. Many housekeepers wonder why their carpets do not last as well as their neighbor's, which were put down at about the same time, or why this carpet does not wear as well as a previous one of the same kind, and the weaver gets the blame, when nine times out of ten it is the sweeper who is to blame. We don't care how smart our help is in other ways, if she digs her broom into the carpet in that pitching, scrubbing way which so many do, we begin to feel nervous, and wish the "help" was somewhere else, for we know how soon the carpet will begin to show it. Nothing in the world sooner spoils good pictures than dust. It gets into the cracks and corners, where it cannot be got out, so that we think it best to always dampen the broom before sweeping. Some people wear out the broom all on one side. Nothing is more suggestive of carelessness

than this. When sweeping, hold the broom nearly straight up and down, and brush rather than sweep, being careful to keep the longest side next the carpet. A broom kept straight will last three times as long as one allowed to wear out all on one side. When sweeping, take a teacupful of corn meal, moisten a little, and sprinkle on the carpet before sweeping. It will all sweep off, and will keep the dust from rising. It also has the effect to scour the carpet and keep it perfectly clean. When sweeping, dip your broom occasionally in water, hot is best, and keep the dust from flying over everything. Coarse salt sprinkled over the floor occasionally is said to keep the moths out of the carpet.

Syrup (Cathartic.)—Best senna leaf, one ounce; butternut, the inner bark of the root, dried and bruised, two ounces; peppermint leaf, one-half ounce; fennel seed, one-half ounce; alcohol, one-half pint; water, one and one-half pints; sugar, two pounds; put all into the spirit and water, except the sugar, and let it stand two weeks; then strain, pressing out from the dregs. adding the sugar and simmering a few minutes only to form the syrup. If it should cause griping in any case, increase the fennel seed and peppermint leaf. Dose, one tablespoonful once a day, or less often if the bowels become too loose, up to the next period when the headache might have been expected, and it will not be forthcoming.

Syrup for Consumptives.—Of tamarac bark, take from the tree, without rossing, one peck; spikenard root, one-half pound; dandelion root, one-quarter pound; hops, two ounces. Boil these sufficient to get the strength in two or three gallons water; strain, and boil down to one gallon; when blood warm, add three pounds best honey and three pints best brandy; bottle and keep in a cool place. Dose, drink freely of it three times per day before meals, at least a gill or more. Cure very certain.

Syrup (Soothing).—1. Alcohol, oil of peppermint, castor oil, of each one ounce; mix, add oil of anise, half dram; magnesia, sixty grains; pulverized ginger, forty grains; water, two ounces; white sugar to form a syrup.

2. Take one pound of honey; add two tablespoonfuls of paregoric, and the same of oil of anise seed; add enough water to make a thick syrup, and bottle. For children teething, dose, teaspoonful occasionally.

Table-covers.—1. Handsome table-covers are made of alternate squares or half-square of basket flannel and of velveteen; one made of two shades of brown is very pretty, and one of brown and lemon color is particularly effective. The spread should be lined; it is not necessary that the entire lining should be of expensive material; unbleached factory cloth will answer, provided that the facing is deep. No border is requisite, but if one prefers to have it, this should be of velveteen, and the facing of a contrasting color. If the blocks are neatly put together, no needlework is necessary to adorn the spread,

but of course this point must be determined according to the taste and means of the maker.

2. A simple but very handsome scarf for a small table is made by taking three strips of broad ribbon, have the center strip of a contrasting color; for instance, if the two outer pieces are of the somber or shaded ribbons, let the center be of cardinal; turn the ends back to make them pointed, and put a tassel on each point; baste the ribbon to a lining of silesia, old silk, or even to Canton flannel, and where the edges join, work fancy stitches. A great variety of scarfs could be made in this form, and be ornamented by putting sprays of flowers in embroidery or painting on each point, or a vine or a scroll could be worked with good effect on the center stripe.

3. Small round tables can be covered with a pretty gray cloth; draw it over the edge and fasten it on the underside with carpet tacks; finish the edge with macrame lace; do not fasten it on with tacks; take a needle and strong thread and blind-stitch it on. The lace should be lined with satin, or any color that will harmonize with the other furniture. Line a piece of the lace and fasten it around your shelf in place of the lambrequin, and you will like it much better. Take a piece of board the length of your shelf, cover it with the satin, paint a vine upon it; begin at the lower left-hand corner and let it extend almost to the upper right-hand corner; place this on your shelf against the wall, and you have a nice background for vases and small statuary.

4. The first, for a table longer than wide, is of olive green felt, trimmed with a band of cardinal plush about a finger wide, and put on with yellow embroidery silk in any of the fancy stitches. A worsted fringe composed of the different shades of olive green, tipped with a dash of red, serves as a finish to the bottom. The lining is of olive green Canton flannel, although I had intended it to match the plush band, but not being able to get anything near the color, had to fall back upon the olive green.

The second is a scarf of olive brown plush lined with cardinal silk. On one end is embroidered pink and white flowers, with their leaves in the different shades of green, and on the other side, red and yellow flowers with their leaves. The cardinal lining extends beyond the plush on the long sides in three small folds, so as to form a finish. The short sides below the embroidery are finished with red silk balls about an inch apart.

The third cover is for an octagon topped stand. It is of English red plush, nailed tightly over the top, while from the sides hang scalloped lambrequins, one scallop to a side, each of which is embroidered in patterns of pink primroses, pond lilies, forget-me-nots, fine white flowers, leaves, etc. A fancy fringe, the predominant color of which is red, finishes the bottom of each lambrequin.

Instead of plush for the last two tables, felt or Canton flannel may be used with very pretty effect.

5. Materials required are only two inside coffee sacks, and little

balls of worsted left from other fancy work. First cut one end of the sack off so as to have a square, then turn under the edges to prevent them from raveling. About an inch from the edge work a border all around the square of any color of worsted.

Inside of the border work a large cat-stitch, or any other stitch if preferred, in different colors, with about half an inch between the colors. For the center of the table-cover, inside the square of black, I worked in the same stitch as the border, a red rose with green leaves and red buds. Some persons sew on a square of colored cloth with applique figures for the center. Cut the second sack and the remnant of the first into strips about six inches wide, and ravel out the threads, leaving an inch for a heading. Put this fringe on double around the square, allowing plenty for the corners, and conceal the sewing by a cat-stitch of any color.

Table-covers—for bed-rooms.—Simple and tasteful table-covers for bed-rooms may be made of pale blue Canton flannel trimmed with antique lace, or with velvet ribbon feather-stitched on. and finished with fringe made of blue split zephyr or Shetland wool.

Table of Daily Savings at Compound Interest.

Cents per Day.	*Per Year.*	*In Ten Years.*	*Fifty Years*
2¾	$ 10	$ 130	$ 2,900
5¼	20	260	5,800
11	40	520	11,600
27½	100	1,300	29,000
55	200	2,600	58,000
1.10	400	5,200	116,000
1.37	500	6,500	145,000

By the above table it appears that if a mechanic or clerk saves two and three-fourths cents per day from the time he is twenty-one till he is seventy the total with interest will amount to $2,900, and a daily saving of twenty-seven and one-half cents reaches the important sum of $29,000. Save all you can in a prudent manner for a time of possible want, but act justly by paying all your debts and liberally by assisting those in need and helping in a good cause.

Table Etiquette.—There is nothing so disagreeable as careless and untidy table manners; and to acquire graceful and pleasing habits while eating sometimes takes years of practice. But it can be done; we see everywhere ladies and gentlemen, and sometimes children, who show their good breeding by their conduct at the table. To begin to make yourselves like these the first thing to do is to sit down and think how you really behave at the table. Are your hands and nails and face clean, and hair brushed back smoothly? Do you seat yourself quietly, and remember to put on your napkin? Do you sometimes put your knife in your mouth, instead of a fork or spoon? Do you pour your tea in your saucer, instead of drinking from the cup? How do you pass your plate, if you are to be helped a second

time? The best way is to hold your knife or fork in your hand, and then it will not fall on the cloth.

Then about passing articles of food: Do you reach over another person's plate, or stand up to reach something not near at hand, and knock over a glass or cruet in the attempt? Do you eat fast and loud, and put large pieces in your mouth, or speak with food unchewed, or pick your teeth? Oh, I hope none of these, for any one of them would make you appear impolite and uncultivated. And then you remember not to whisper, yawn, or stretch, or touch the hair, or blow the nose. If it is necessary to use your handkerchief, do it so quietly that no one will notice it; but this should be done before you come to the table. And if there are bones, cherry pits, and things that cannot be swallowed, do not spit them on the plate, but put them on your spoon and then on your plate.

Will you think of these hints the next time you sit down to your dinner and avoid them? And remember that courtesy at the table is as indispensable as away from it, and if you practice it at home, you will not have to put it on when you are away, it will be so natural and easy for you.

Table for the Library.—An ordinary kitchen table can with little trouble be transformed into quite an elegant piece of furniture for the library. The top and legs are smoothly covered with green cloth, the seam on the legs to be neatly sewed and the joining made on the inside of the leg that it may not show. It is then tacked at the top to hold it in place. The cloth is drawn smoothly over the top and tacked all round the sides. The head piece extending round the sides of the table must also be covered. An under shelf is made of pine wood covered with cloth and fitted securely to the legs about eight inches below the top. A heavy cord fringe of green worsted must be fastened round the shelf, with brass-headed nails about an inch and one-half apart. A castor fitted into each leg will finish a very handsome table.

Table Mats—to make.—Get matting that comes around tea chests. Scrub well with soap-suds, then rinse, and wash again with soda water to turn it yellow. When dry, cut the desired shape and bind with scarlet braid.

Table Mats—to bleach.—Wash them clean with soap-suds. Put a pan of live coals into the bottom of an old barrel. Over the coals sprinkle a quantity of sulphur, hang the wet mats into the barrel so they will receive the fumes of the sulphur, and cover tight. Take care, of course, that they do not catch fire from hanging too near the coals. Several of these "smudges" will be needed. When the mats are as white as desired, take them out. If they seem warped and out of shape from their alternate wetting and drying, dampen and press with a hot iron, or, as perhaps is better, under a steady, heavy weight until dry again.

Table (Parlor)—to make.—A beautiful little piece of furniture for a drawing-room may be made of a pine table, round or triangular,

nicely ebonized. To do this, melt a quarter of a pound of best size in a stone pot, with water sufficient to cover it. Do not allow it to boil. Mix a small quantity of lamp-black and a very little blue-black, with oil, into the consistency of paste. Pour the size upon it, and mix all thoroughly well. Apply to the wood while warm, painting it thickly, and when dry varnish it with two or three coats of copal varnish. This will make it a dull, dead black, resembling ebony. The top of the table may be covered with olive or crimson plush, embroidered in pink wild roses or white dogwood blossoms, either in silk or in the pretty ribbon work now in vogue.

Table Scarf—to make.—A useful table scarf, and one that is particularly pleasing to the eye, because it does not suggest almost endless labor, is made by taking a strip of all wool Java canvas of the proper length for the table on which it is to be used. Line it with some stiff cloth and then with silesia. At about three inches from the outer edge sow on two strips of black velvet ribbon two inches wide. Through the center work a handsome scroll pattern, using bright yellow silk; the velvet stripes may be put on precisely plain, or may be worked in old fashioned cross stitch, or in some modification of feather stitch. Finish the bottom of the scarf with yellow silk balls. This is suitable for the common sitting-room; it is so bright that the dust can be shaken from it with ease.

Table Showing Number of Plants on an Acre at Special Distances.

6	inches apart each way	174,240
1	foot " " "	42,560
18	inches " " "	19,360
2	feet by 1 foot	21,780
2	feet each way	10,890
3	feet by two feet	7,260
3	feet apart each way	4,840
4	feet " " "	2,725
5	feet " " "	1,745
6	feet " " "	1,210
7	feet " " "	887
8	feet " " "	680

Table Showing Quantity of Seeds Required for a Given Number of Plants, Number of Hills, or Length of Drill.

Asparagus	1 oz. to	60 ft.	drill.
Beet	1 oz. to	60 ft.	"
Carrot	1 oz. to	150 ft.	"
Endive	1 oz. to	150 ft.	"
Okra	1 oz. to	40 ft.	"
Onion	1 oz. to	100 ft.	"
Onion sets, small	1 oz. to	20 ft.	"
Parsley	1 oz. to	150 ft.	"
Parsnips	1 oz. to	200 ft.	"
Radish	1 oz. to	100 ft.	"

Salsify	1 oz. to	70 ft.	drill.
Spinach	1 oz. to	100 ft.	"
Turnip	1 oz. to	150 ft.	"
Peas	1 qt. to	100 ft.	"
Dwarf Beans	1 qt. to	100 ft.	"
Pole Beans	1 qt. to	150	hills.
Corn	1 qt. to	200	"
Cucumber	1 oz. to	50	"
Watermelon	1 oz. to	30	"
Muskmelon	1 oz. to	60	"
Pumpkin	1 oz. to	40	"
Early Squash	1 oz. to	50	"
Marrow Squash	1 oz. to	16	"
Cabbage	1 oz. to	3,000	plants.
Cauliflower	1 oz. to	3,000	"
Celery	1 oz. to	4,000	"
Egg Plant	1 oz. to	2,000	"
Lettuce	1 oz. to	4,000	"
Pepper	1 oz. to	2,000	"
Tomato	1 oz. to	2,000	"

Table Showing Quantity of Seeds Usually Sown to the Acre.

Barley, broadcast	2 to 3	bush.
Beans, dwarf, in drills	1½	bush.
Beans, pole, in hills	8 to 10	qts.
Beet, in drills	4 to 5	lbs.
Broom-corn, in hills	4 to 6	qts.
Buckwheat, broadcast	¾ to 1	bush.
Carrot, in drills	2 to 3	lbs.
Corn, in hills	8	qts.
Corn in soiling	3	bush.
Clover, Alsike	5	lbs.
Clover, Red, alone	10	lbs.
Clover, Red, with Timothy	10	lbs.
Clover, White	6 to 8	lbs.
Clover, Lucerne	15	lbs.
Cucumber, in hills	1 to 2	lbs.
Flax, broadcast	1 to 2	bush.
Grass, Blue, alone	3	bush.
" Hungarian	½	bush.
" Lawn	3	bush.
" Orchard	2 to 3	bush.
" Red Top	2	bush.
" Rye	2	bush.
" R. I. Bent	3	bush.
" Timothy	¼	bush.
Millet	½	bush.
Mustard, broadcast	12 to16	qts.
Oats, broadcast	2 to 3	bush.

Onions, in drills	4 to 6	lbs.
Parsnips, in drills	4 to 5	lbs.
Peas, Early, in drill	1½	bush.
Peas, Marrowfat, in drills	1¼	bush.
Peas, broadcast	3	bush.
Potato, cut tubers, in drills	10	bush.
Radish, in drills	6 to 8	bush.
Radish, broadcast	10	lbs.
Rye, broadcast	1½to 2	bush.
Salsify, in drills	6 to 8	lbs.
Sorghum	10 to12	lbs.
Spinach, in drills	8 to10	lbs.
Turnip, in drills	1	lb.
Turnip, broadcast	2	lbs.
Vetches, broadcast	2 to 3	bush.
Wheat, broadcast	1½ to 2	bush.

Clover, 8 lbs.
Timothy, 6 qts. } together for one acre.
Red Top, 1 bush.

Taffy (Sugar).—One pound sugar put in a pan with half tumbler cold water, add one teaspoon cream tartar, lump of butter size of a hickory nut, one teaspoon vinegar (do not stir at all), boil slowly twenty-five minutes, and drop a little into cold water, and if crispy it is done; turn on to plates and pour on flavoring—lemon and vanilla, half each—pull till very white.

Tallow—to cleanse and bleach.—Dissolve alum, five pounds, in water, ten gallons, by boiling; and when it is all dissolved, add tallow twenty pounds; continue the boiling for one hour, constantly stirring and skimming; when sufficiently cool to allow it, strain through thick muslin; then set aside to harden; when taken from the water, lay it by for a short time to drip.

Tanning.—The first operation is to soak the hide, as no hide can be properly tanned unless it has been soaked and broken on a fleshing beam. If the hide has not been salted add a little salt and soak it in soft water. In order to be thoroughly soaked green hides should remain in the liquor from nine to twelve days, of course the time varies with the thickness of the hide. The following liquor is used to remove hair, or wool, viz.: Ten gallons cold water (soft); eight quarts slaked lime, and the same quantity of wood ashes. Soak until the hair or wool will pull off easily. As it frequently happens it is desirable to cure the hide and keep the hair clean, the following paste should be made, viz: Equal parts of lime and hard wood ashes (lime should be slaked) and made into a paste with soft water. This should be spread on the flesh side of the hide and the skin rolled up, flesh side in, and placed in a tub just covering it with water. It should remain ten days or until the hair will pull out easily, then scrape with a knife. The skins of animals are composed mainly of glue or gluten. This is soluble, and the principle derived from the

bark, tannin or tunic acid, is also to a considerable extent soluble, when the latter is allowed to act upon the former, chemical combination takes place, and leather is produced, which is insoluble.

Tanning With Acid.—After having removed the hair, scouring, soaking and pounding in the suds, etc., as in the last recipe, in place of white vitriol, alum and salt as there mentioned, take oil of vitriol (sulphuric acid), and water, equal parts of each, and thoroughly wet the flesh side of the skin with it, by means of a sponge or cloth upon a stick; then folding up the skin, letting it stand for twenty minutes only, having ready a solution of sal-soda and water, say one pound to a bucket of water, and soak the skin or skins in that for two hours, when you will wash in clean water, and apply a little dry salt, letting lie in the salt over night, or that length of time; then remove the flesh with a blunt knife, or if doing business on a large scale, by means of the regular beam and flesh-knife; when dry, or nearly so, soften by pulling and rubbing with the hands, and also with a piece of pumice-stone. This, of course, is the quickest way of tanning, and by only wetting the skins with the acid, and soaking out in twenty minutes, they are not rotted.

Tanning Calf, Kip, and Harness Leather in from Six to Thirty Days.—For a twelve pound calf-skin, take three pounds terra japonica; common salt, two pounds; alum, one pound; put them in a copper kettle with sufficient water to dissolve the whole without boiling. The skin will be limed, haired, and treated every way as for the old process, when it will be put into a vessel with water to cover it, at which time you will put in one pint of the composition, stirring it well, adding the same night and morning for three days, when you will add the whole, handling two or three times daily all the time tanning; you can continue to use the tanning liquid by adding half the quantity each time, by keeping these proportions for any amount. If you desire to give a dark color to the leather, you will put in one pound of Sicily sumac; kip skins will require about twenty days, light horse hides for harness thirty days, calf-skins from six to ten days at most.

Tanning Hides With the Hair On.—When taken from the animal, spread it flesh side up; then put two parts of salt, two parts of saltpeter and alum combined, make it fine, sprinkle it evenly over the surface, roll it up, let it alone a few days till dissolved; then take off what flesh remains, and nail the skin to the side of a barn in the sun, stretch tight, to make it soft like harness leather, put neat's-foot oil on it, fasten it up in the sun again; then rub out all the oil you can with a wedge-shaped stick, and it is tanned with the hair on.

Tanning Muskrat Skins with the Fur on.—First, for soaking: To ten gallons cold soft water add eight parts of wheat bran; old soap, one-half pint; pulverized borax, one ounce; sulphuric acid, two ounces. If the skins have not been salted, add salt, one pint. Green skins should not be soaked more than eight to ten hours. Dry ones should soak till very soft. The sulphuric acid hastens the soaking

process. For tan liquor: To ten gallons warm soft water add bran, one-half bushel; stir well and let it ferment in a warm room. Then add slowly, sulphuric acid, two and one-half pounds; stir all the time. Muskrat skins should remain in about four hours; then take out and rub with a fleshing knife; an old chopping knife with the edge taken off will do. Then work it over a beam until entirely dry.

Tanning Woodchuck Skins.—The best way to tan woodchuck skins with the hair on is to sprinkle salt and alum on the hides, roll them up and let them lie until the salt is melted. To tan without the hair on, put the hides into a bucket of ashes and water, let it lie until the hair comes off fully, then take the hair off, then put it (the skin) into soft-soap, let it lie there until the lye eats the flesh off, then take it out and rub it dry over a smoke. Then you have a hide that can't be beat for toughness.

Tan—to remove.—Tan may be removed from the face by mixing magnesia in soft water to the consistency of paste, which should then be spread on the face and allowed to remain for a minute or two; then wash off with castile soap-suds and rinse with soft water.

Tape Worm.—To expel this parasite, take equal parts of tincture assafœtida and tincture absinthii, in teaspoonful doses, night and morning. No fasting is necessary.

Tape Worm—cure for.—Take at one dose ether, two-third ounces; two hours after this take castor-oil, one ounce. The worm is discharged entire or almost so, and always with the head intact.

Tar from the Hands—to remove.—We recommend rubbing the hands with the outside of fresh orange or lemon-peel and wiping dry immediately. It is astonishing what a small piece will clean. The volatile oil in the skins dissolve the tar, so that it can be wiped off.

Tea—to increase the strength of.—A French chemist asserts that if tea be ground like coffee before hot water is poured upon it, it will yield nearly double the amount of its exhilarating qualities. Another writer says, if you put a piece of lump-sugar, the size of a walnut, into a teapot, you will make the tea infuse in half the time.

Tea—how to make it go further.—A method has been discovered for making more than the usual quantity of tea from any given quantity of the leaf. The whole secret consists in steaming the leaf before steeping. By this process, it is said, fourteen pints of good quality may be brewed from one ounce of tea.

Tea Cakes (Lemon).—Rub half a pound of butter into a pound of liquor; add half a pound of finely sifted sugar, grate the rind of two lemons and squeeze in the juice of one and two eggs. Mix all well together, roll out the paste, cut into shapes, and bake in a slow oven.

Tea-kettles—care of.—Prevent the formation of a crust in tea-kettles by keeping in them an oyster shell.

Teeth—to care for.—While it is a fact that good and bad teeth are largely inherited, yet good ones may soon be injured by neglect. Not only as a matter of health should the teeth be preserved as far as possible, but for appearances. Nothing more detracts from the

comeliness of a young man or woman than the display of teeth yellow and black from neglect; the better looking the person, the more glaring is this blemish. Parents are often greatly to blame in this respect. As soon as a child gets its permanent teeth he or she should be taught to use a tooth brush, with water, at least once a day. This would often save the child from much mortification and perhaps misery in after life. The use of a tooth brush, not too stiff, with water simply, morning and night, is all that most teeth require. If any acid fruits (lemons, oranges, etc.,) are partaken of between meals the mouth should be rinsed with a solution of soda-bicarbonate (common cooking soda—one-half teaspoonful to one-half glass of water), to neutralize the acid, which would, if allowed to remain in contact with the teeth, corrode the enamel very rapidly. This is especially true of children's teeth. If tartar collects in spite of this, the use of castile soap (the white is preferable) upon the brush will generally answer. If something more is needed to keep the teeth clean, prepared chalk is one of the safest tooth powders. Avoid all tooth powders that are at all gritty. Some contain powdered pumice-stone, which will remove both the tartar and the enamel. In using the brush, it is equally as important to apply it to the back-side of the teeth as to the front, and instead of only moving it across the teeth, a part of the brushing should be from the gums upward and downward, to remove any particles that have lodged between them. Never use a metallic tooth-pick; a sliver of wood is preferable even to the quill so commonly used. No nostrum advertized to bleach the teeth should be used, as such dentifrices contain ingredients that are liable to exert deleterious effects upon these invaluable organs of mastication. Whenever decay is noticed in the teeth, go to the dentist at once.

Teeth—ways to preserve.—1. Dissolve two ounces of borax in three pints of boiling water, and before it is cold add one teaspoonful of spirits of camphor; bottle for use. Use a teaspoonful of this with an equal quantity of tepid water.

2. Charcoal and honey, mixed together and used as a dentifrice, will whiten the teeth with a few applications.

Teeth—acting of acids on.—All mineral as well as vegetable acid act promptly on the teeth. In forty-eight hours acetic, citric and malic acids will corrode the enamel so that you may scrape a great portion of it away with the finger nail.

Teeth—to extract with little or no pain.—Tincture of aconite, chloroform, and alcohol, of each one ounce; mix, moisten two pledgets of cotton with the liquid, and apply to the gums on each side of the tooth to be extracted, holding them in their place with pliers or other instruments for from five to ten minutes, rubbing the gum freely inside and out.

Teeth—to fasten loose and strengthen the gums.—Dissolve one ounce of myrrh as much as possible in a pint of port wine and the same quantity of oil of almonds; wash the mouth with the fluid every

morning. This is likewise an excellent remedy for worms in the gums.

Teeth and Breath—how to care for.—With due attention to the health and thorough brushing of the teeth at least night and morning, all that is needful to secure a sweet breath is to chew a bit of licorice after using the tooth brush. This will even counteract the effects of diseased breath, and does not convey the unpleasant suggestions of cachus and spice that are used to hide an offense. Licorice has no smell, but it actually sweetens the mouth and stomach. A stick of it should be chipped for use, and kept in a box for the toilet.

A tincture for the teeth and gums which restores soundness to the latter, is an infusion of one ounce of coarsely powdered Peruvian bark steeped a fortnight in half a pint of brandy. Gargle the mouth night and morning with a teaspoonful of this tincture, diluted with an equal quantity of rose water.

For decaying teeth make a balsam of two scruples of myrrh in fine powder, a scruple of juniper-gum, and ten grains of rock alum, mixed in honey. Apply this balsam frequently to the decayed teeth.

Spite of all that is said against it, charcoal holds the highest place as a tooth powder. It has the property, too, of opposing putrefaction, and destroys the vices of the gums. It is most conveniently used when made into paste in honey.

Teeth—to remove tartar from.—The tartar which so generally accumulates at the back of the teeth, forming often a thick crust, may speedily and effectually be removed by brushing it with a soft brush dipped in fresh flower of brimstone. After a few applications the tartar will crumble away. An excellent recipe.

Telephone (Cheap)—to make.—Take a wooden tooth powder box and make a hole of about the size of a half crown in the lid and the bottom. Take a disc of tinned iron, such as can be had from a preserved meat tin, and place it on the outside of the bottom of the box, and fix the cover on the other side of it. Then take a small bar-magnet, place on one end a small cotton or silk reel, and round the reel wind some iron wire, leaving the ends loose. Fix one end of the magnet near, as near as possible without touching, to the disc, and then one part of the telephone is complete. A similar arrangement is needed for the other end. With this one can converse at a distance of about one hundred yards.

Terrapins—to cook.—Boil them ten minutes, take them out of the water and pull off the outer shell. Then boil them again till the claws becomes tender. Then take them out of the inner sheH, being careful not to break the gall, which must be taken from the liver and thrown away; throw away all the spongy part—the rest is fit to eat. Cut the terrapin into small pieces, put them into a stew-pan with a little salt, cayenne pepper, and some butter. After they have stewed a few minutes in the butter, add a gill of water to each terrapin. Stew ten minutes longer, then add some butter rolled in flour, an-

other gill of water to each terrapin, and stew five minutes longer; take them from the fire, and stir in one beaten yolk of an egg to each terrapin; cover the pan tightly, let it stand five minutes, then pour into a deep dish and send to the table.

Tempering Tools.—Drawing the temper of tools is usually done in a charcoal flame, and to draw the temper of a tool properly it should be held in the thickest part, or the part not requiring any temper, toward the fire, and, in the meantime, should be often wiped with a piece of waste or rag, dipped in oil. The oil keeps the temper even, and prevents it drawing more to one place than another. And in drawing the temper of any tool it should be drawn very slowly, otherwise it will run too far ere you are aware of it. Lancet blades and razors should be drawn to a straw color. Knife blades and chisels should be drawn to a copper or almost red color. Plane irons, shaving irons and shoemakers' knives the same temper; cold chisels and stone drills should be drawn to a dark blue. Flinted reamers should only be drawn to a straw color, on the end, as they never break elsewhere, and keep their size longer by leaving the lips hard. Half round or tapering reamers, also taps, dies and drills, should be drawn to a straw color. Gauges and common lathe tools need no drawing, being tempered enough when merely hardened.

Tests for Good Flour.—Good flour is white, with a yellowish or straw-colored tint. Squeeze some of the flour in your hand; if good, it will retain the shape given by pressure. Knead a little between your fingers; if it works soft and sticky, it is poor. Throw a little against a dry perpendicular surface; if it fall like powder; it is bad.

Tetter—cure for.—Procure some strawberry leaves, and lay the outside or the woolly side of the leaf on the parts affected. They must be laid on very thick, and be changed occasionally. They will draw out inflammation and cure the disease.

The Man Who Hurries.—The bustling hurrying man, as a matter of fact, is a poor worker. Too much of his steam power is expended in kicking up dust. The habit of hurrying or feeling in a hurry is fatal to good work, and diminishes the amount of work a man can do. The friction is too great. So little of practical value is accomplished that he cannot go home at night with a sweet consciousness of a duty done, of a day's work completed.

The men who accomplish most never seem in a hurry, no matter how much they have to do. They are not troubled for lack of time, for they make the most of the minutes by working in a cool, methodical manner, finishing each job properly, and not expending their nervous force in bustle. They never complain of overwork, but are more likely to hunt up new work in order to give their faculties more varied employment and to exercise some which are not sufficiently used.

Things to try.—Try popcorn for nausea.

Try cranberries for malaria.

Try a sun-bath for rheumatism.

Try ginger ale for stomach cramps.
Try clam broth for a weak stomach.
Try cranberry poultice for erysipelas.
Try a wet towel to the back of the neck when sleepless.
Try swallowing saliva when troubled with sour stomach.
Try eating fresh radishes and yellow turnips for gravel.
Try eating onions and horseradish to relieve dropsical swellings.
Try buttermilk for removal of freckles, tan, and butternut stains.
Try taking your cod liver oil in tomato catsup, if you want to make it palatable.
Try hard cider—a wine-glass three times a day—for ague and rheumatism.
Try taking a nap in the afternoon if you are going to be out late in the evening.
Try breathing the fumes of turpentine or carbolic acid to remove whooping cough.
Try a cloth wrung out from cold water put about the neck at night for sore throat.
Try snuffing powdered borax up the nostrils for catarrhal "cold in the head."
Try walking with your hands behind you if you find yourself becoming bent forward.
Try a silk handkerchief over the face when obliged to go against a cold piercing wind.
Try planting sunflowers in your garden if compelled to live in a malarial district.

Things Worth Knowing.—A man walks three miles an hour, a horse trots seven; steamboats run eighteen, sailing vessels make ten; Slow rivers flow four, rapid rivers flow seven; storms move thirty-six, hurricanes eighty; a rifle ball one thousand miles a minute, sound eleven hundred and forty-three; light one hundred and ninety thousand; electricity two hundred and eighty thousand.

Wheat, beans, clover-seed, and potatoes, sixty pounds to the bushel; corn, rye, and flax seed, fifty-six; buckwheat, fifty-two; a barrel of rice, six hundred; barley, forty-eight; oats, thirty-five; coarse salt, eighty-five.

A barrel of flour weighs one hundred and ninety-six pounds; a barrel of pork, two hundred; a barrel of powder, twenty-three; a firkin of butter, fifty-six; a tub of butter, eighty-four.

Four thousand eight hundred and forty square yards make an acre; a square mile, si hundred and forty acres; to measure an acre—two hundred and nine feet on each side, makes a square acre within an inch

Thistles (Canada)—to kill.—The best way is to let them grow until they blossom, then cut them off near the top of the ground; the stalk will then be hollow; the water will get in the hollow and rot them, so they will never sprout again. If they are cut off with a hoe

or plow, the ground will close over them, and there will come two sprouts for one.

Throat (Sore)—remedies and treatment.—1. A lightly sore or irritated throat is usually relieved or cured by applying an irritant to the outside. "Volatile liniment" is good for this. It is made by shaking well together any amount of sweet oil with one-fourth to one-half its bulk of aqua ammonia, or "hartshorn"—the amount depending upon the strength of the ammonia. It is a good, cheap counter-irritant to keep on hand—well corked, using a new cork as the old one shrinks from the action of the ammonia. It is also useful to rub well on the chest when there is soreness in the muscles. Alcohol, or strong whisky, rubbed upon the throat (outside) as a counter-irritant, often relieves a sore throat, and the same of a sore chest. When using alcohol cover the part well and quickly to prevent a chill from the rapid evaporation. Liniment, alcohol, hot water, or hot wet clothes, or mustard, on the outside of the abdomen tends to relive irritation of the bowels, on the general principle of counter-irritation above mentioned.

2. For an inflamed sore throat or tonsils, a very good general remedy is to gargle the throat every hour or two with a teaspoonful of chlorate of potassa solution. It is well to keep in every house a good-sized phial of water with more chlorate of potassa in it than will dissolve. The clear liquid is then always of uniform strength, ready for use—a teaspoonful at a time, swallowing it after gurgling it against the inflamed tonsils.

3. I have been for years troubled with throat and chest diffiulties. In the fall I commenced bathing my chest, throat, and neck, as soon as I was up in the morning, with cold water, rubbing briskly after it. Have not had the slightest irritation of those parts since. I send you this hoping it will be of as much benefit to others as to me.

4. A gargle of salt and vinegar, with a little cayenne pepper, will do more to disperse soreness of the throat than any other remedy of which we have heard. It stimulates the glands, promotes free secretion, and will sometimes cure in a few hours.

5. A sore throat may come from a variety of causes, but most frequently from taking cold. In many persons the slightest chill is felt at once in the tonsils. A wet cloth around the neck, covered with a dry one, during the night, is often effective, if care be taken not to expose the throat to cold in the morning. Whenever there is redness or inflammation of the tonsils, or back of the mouth, a very simple remedy, usually effective, and in no case harmful, is a teaspoonful of chlorate of potash solution, used as a gargle, and then swallowed. Repeat this every two or three hours as long as necessary. Chlorate of potash is cheap, is found at all druggists, and it is well to keep it on hand in solution. In a large phial, or small bottle of water, put as much chlorate of potash as will dissolve on shaking and standing, and the solution is always ready for use. A pint of cold water will dissolve about an ounce. Chlorate of potash

contains nearly two-fifths of its weight of pure oygen, and this readily oxydizes any disorganized material, and is frequently useful to the whole system.

Throat—hoarseness or thickling in.—Take a small quantity of dry pulverized borax, place it on the tongue, and let it slowly dissolve and run down the throat. It is also good to keep the throat moist at night and prevent coughing.

Thyme—to grow.—Thyme will grow anywhere, but it prefers a dry, poor soil; if the ground is rich the plant will become too luxuriant and lose its aromatic qualities.

Ticks for Feathers—how to clean.—Take a sheet and sew it up like a bag, leaving an opening at the top about half way across. Then proceed to rip open one end of the feather tick about the same number of inches, and sew the spaces together; that is, sew the feather tick to the bag, and then shake and work the feathers from the tick into the bag. When the tick is empty, sew up the opening that no down or feathers adhering to the inside of the tick may be lost in washing it. Pillow ticks serve in the same manner. If the ticks are badly soiled, soak them for a while in warm water before washing. Wash very thoroughly in the usual way, and rinse in several waters. Add starch to the last water, and dry speedily by hanging in the breeze some pleasant day. While slightly damp, iron. Return the feathers to the tick by sewing it to the sack as at first.

A good way, and one that is coming into pretty general use, is to take some unbleached cotton and make cases for feather beds, after the manner of pillow cases, buttoning up the open ends. These cases can be removed and washed as often as necessary, and it is a safe way to protect a nice tick from being soiled.

Tidy—to make.—1. The requisites are a ball of number fourteen tidy cotton, and a wooden frame about twenty inches square, with an inch sprig driven half down in the center of each corner, and similar ones along the sides in line with these, and an inch apart.

Fasten your cotton to the second side sprig, and weave from this sprig to the one directly opposite, passing round each sprig three or four times; then draw the thread to the next sprig and weave in the same manner. Continue this until you reach the second sprig from the side you are working toward. Now cross these threads in the same way from the other two sides, then cross with the same number of threads diagonally in both directions. You will then have on your frame four warps, each in different directions. With a needle and tidy cotton securely fasten, as they are every place where four sets of threads intersect, drawing the cotton from one to another. Cut the cotton at every sprig, and it is finished, except trimming the fringe a little. Made in this way they are serviceable, and less work than you would think.

2. Pretty tidies, or chair-backs they are called now, of the pretty cretonnes so much used. Use three stripes, the center one dark, the outer two light. Turn the edges, and crochet an edge of shells all

around the stripe, making it pointed on the lower edge, and about three or four rows of shells around each stripe. Join together, finish the pointed ends with tassels, and baste silesia or muslin on the back of each stripe to make it firm.

3. Quickly made tidies are of cretonne and velvet. Select a cretonne with narrow strips and of beautiful pattern. Alternate the strips, making the center one the largest, and graduating them in length to the outside. Point each one and attach a tassel, or make straight at the top and pointed at the bottom. Feather-stitch the velvet down over the edges of the cretonne, and make the tassel of crewel, or purchase those already made.

4. Tidies which can be washed are always useful. The following will be found pretty and inexpensive: Material, one square of Java canvas and one ball of No. 10 Dexter cotton, white. Commence at a corner, leave an inch and one-half each way for the fringe, button-hole stitch around the corner, taking three rows of threads; then do a row of slanting stitch, taking two rows of threads. Then draw out each way two double threads of the canvas. Then make the blocks fourteen double threads each way, and pull out three double threads each way, being careful not to draw it through the fringe, but cut it close to the slanting lines. To work the blocks, begin in the middle and pass the needle through the drawn threads and back into the middle each time, making five threads on each side of the block all around. Nine blocks square make a very pretty sized tidy. Draw your threads only as you go along.

Timber and Wood Seasoning.—Timber changes but little in the process of seasoning in the direction of its length, but it shrinks considerably in the direction of its thickness. Much economy may be practiced, and great waste prevented, by builders having sheds of sufficient extent; the ventilation should be whole, and without partial draught, which might effect the ends or any portion of the drying wood more than another; and, as timber rots so much more rapidly by the ends than by the sides, the roof should hang well over to protect them. The advantages of shedding wood are very evident, for, left exposed at one time to the scorching heat of a noonday sun, at another time to the effect of drenching rains, and in the winter split, shaken and riven by the freezing of the water which has insinuated itself into the pores, it has been found by those who deal largely with it that it needs but short work to destroy it.

Tin Cans (Old)—to utilize.—With a large pair of shears the cans may be treated as pieces of tin, and with a little ingenuity a bread grater, a rude dipper, a fruit gatherer, and a glue pot may be constructed.

But the most attractive articles are the bird-houses and flower-pots and stands. For the first the cans were dipped in a large pan of melted asphalt and then rolled in dry sand. This gives them a natural ground color, on which can be fastened while the asphalt is still warm the ordinary dry packing moss used by florists, wood

mosses, short dry twigs, small cones and burrs, to give a picturesque effect. If the lid is still attached to the can by a bit of solder it can be left for a doorstep for the birds. The various ways of attaching the can to the tree will suggest themselves according to taste.

A single can covered with birch bark and ornamented with burrs, acorns, etc., makes a pretty flower-pot; two partially telescoped, with a portion cut out of the side for the reception of the soil and plants, make a miniature log; three rows, placed one above another by means of different sized round boxes on a round table, make a very pretty stand. In all these cases the cans, the boxes and the table should be well covered with asphalt and then ornamented according to taste with the materials before mentioned. The cans are useful in rockeries also; but these too must be thoroughly treated with the asphalt.

Tinware—to scour.—For scouring tins, cement (water-lime) is most excellent. Rub with a damp cloth dipped in the cement, then wash off with soap and water and dry thoroughly; then with a dry woolen cloth polish with the cement and rub off all adhering particles with another cloth. This method is much more satisfactory than if the ware is merely scoured without polishing, while it is really very little work to one who knows exactly how to do it, and instead of running about to hunt up cloths, have them hung in a convenient place ready for use.

Tinware—to clean.—Acids should never be employed to clean tinware, because they attack the metal and remove it from the iron of which it forms a thin coat. Rub the articles first with rotten-stone and sweet oil, then finish with whitening and a piece of soft leather.

Tinware—to mend by the heat of a candle.—Take a vial about two-thirds full of muriatic acid and put into it little bits of sheet zinc as long as it dissolves them; then put in a crumb of sal ammoniac, and fill up with water, and it is ready to use. Then, with the cork of the vial, wet the place to be mended with the preparation; then put a piece of sheet zinc over the hole, and hold a lighted candle or spirit lamp under the place, which melts the solder on the tin and causes the zinc to adhere without further trouble. Wet the zinc also with the solution, or a little solder may be put on instead of the zinc, or with the zinc.

Tinware—to prevent rusting.—To keep tinware from rusting, rub it over with melted beeswax. Tins that have become old and dingy looking can be made to look as bright as new by rubbing them well with a moist flannel dipped in saleratus. Afterward rub briskly with newspaper. Baking-tins should never be scoured, as they bake much better after they become brown.

Tin Vessels—to clean thoroughly.—To tell whether tin vessels are perfectly clean or not, slide the finger carefully over them, and if they are the least bit slippery you may be sure they have not been properly washed. They should be subjected to a heat that will cut the grease out of them, and nothing but the hottest kind of water or

steam will do this. For cleaning dairy implements, put no trust in patent compounds; just see that the water used is hot, and that it remains hot until the last article is washed.

Toads are Useful.—Toads, according to Professor Miles, live almost entirely upon slugs, caterpillars, beetles and other insects, making their rounds at night, when the farmer is asleep—and the birds, too—and the insects are supposed to be having their own way. French farmers understand these facts so well that they purchase toads, at so much a dozen, and turn them loose.

Toast (French).—1. To one egg thoroughly beaten put one cup of sweet milk and a little salt. Slice light bread, and dip into the mixture, allowing each slice to absorb some of the milk; then brown on a hot buttered griddle, spread with butter, and serve hot.

2. Beat four eggs very light and stir with them one part of milk; slice some nice white bread, dip the pieces into the egg and milk, then lay them into a pan of hot butter and fry brown. Sprinkle a little powdered sugar and cinnamon or nutmeg on each piece, and serve hot.

Toast (German).—A capital dish for breakfast or tea, or for dessert, is the following: Into a pint of milk stir three well-beaten eggs, with two tablespoonfuls of flour and one of sugar, being careful to keep out all lumps. Soak in this, until saturated, medium thick slices of light bread; baker's bread is usually preferable, unless the home-made is light and porous. Have ready, hot, a spider or frying-pan, with just enough butter to prevent sticking. Fry to a golden brown; remove the slices, butter them, and sift on powdered sugar. Pile together, cover, and keep warm until served. Properly made, this is delicious, nutritious and easily digested, if too much butter be not used.

THE SAME, WITH SAUCE.—The above is preferred by some with sauce, instead of butter and sugar, thus: For two or three persons, rub well together two tablespoonfuls of butter, one teaspoonful of flour, and half teacupful of sugar, more if preferred. Stir this first with a little cold water, and then with a full cup of hot water, and boil. Then flavor to taste with lemon, vanilla or rosewater. This sauce is, to our taste, improved by stirring into it, just before taking from the fire, the whole of an egg beaten to a froth. Serve this with the toast, or the pieces may be dipped into it, laid together, covered, and kept warm until wanted.

Toast (Ham).—1. Scrape or pound some cold ham; mix it with beaten egg; season with pepper; lay it upon buttered toast, and place it in a hot oven for three or four minutes. Dried salmon, smoked tongue, potted meats, or any other relishing viands, answer equally well upon toast.

2. A ham or tongue toast is very nearly perfect if served in this way: Cut some slices of either and mince very fine, season with pepper and salt, add a few drops of Harvey's or Worcestershire sauce, take a small lump of butter and a little cream, and with a silver spoon

incorporate the whole; scald and mince a tiny bunch of fresh parsley, spread the whole paste, ham, etc., together on squares of toast cut very thin; sift fine bread-crumbs over the whole, and brown. Potted meat or grouse or chicken may be served in the same way, but these need red pepper to make them sufficiently savory.

Toast and Water.—This is the most wholesome, and, if properly made, palatable drink for children and invalids. Toast two or three thin slices of bread thoroughly, until they are quite dry and of a red-brown color—not burned. Pour boiling water on them, and add a small piece of lemon peel. When cold, strain off into a jug for use.

Tobacco—to cure.—Several years' experience has convinced me that tobacco can be scaffolded to advantage, allowing it to take the dew and sun after culling; this induces it to yellow nicely, and necessitates less firing to cause a rich color than when taken directly from the field to the house. I don't believe in trying to cure black or fancy color, however, but stick to old-fashioned ways, and keep up moderate fires to prevent house-turn. The color comes out all right.

Tobacco—to cultivate.—To raise tobacco, select a sheltered situation, where the young plants can receive the full force of the sun; burn over the surface of the ground early in spring (new land is best), rake it well, and sow the seeds; have a dry, mellow, rich soil, and after a shower, when the plants have got leaves the size of a quarter-dollar, transplant as you would cabbage plants, three and one-half feet apart, and weed out carefully afterward. Break off the suckers from the foot-stalks, as they appear; also the tops of the plants when they are well advanced, say about three feet high, except those designed for seed, which should be the largest and best plants. The ripeness of tobacco is known by small dusky spots appearing on the leaves. The plants should then be cut near the roots, on the morning of a day of sunshine, and should lie singly to wither. When sufficiently withered, gather them carefully together, and hang them up under cover to cure and prepare for market.

Tobacco—fertilizer for.—Add forty pounds of the best Peruvian guano to each one hundred pounds of the superphosphate made by the above recipe, and you will have one of the most powerful fertilizers for tobacco that can be made. If you do not have Peruvian guano, use instead thirty pounds of hen manure to each one hundred pounds of superphosphate.

Toe-nails (Ingrowing).—To cure ingrowing toe-nails, one authority says, put a small piece of tallow in a spoon, heat it until it becomes very hot, and pour on the granulations. Pain and tenderness are relieved at once.

Toilet Hints.—To soften the hands, fill a wash-basin half full of fine, white sand and soap-suds as hot as can be borne. Wash the hands in this five minutes at a time, washing and rubbing them in the sand. The best is the flint-sand, or the white, powdered quartz sold for flitters. It may be used repeatedly by pouring the water away

after each washing, and adding fresh to keep it from blowing about. Rinse in warm lather of fine soap, and, after drying, rub them with dry bran or cornmeal. Dust them, and finish with rubbing cold cream well into the skin. This effectually removes the roughness caused by housework, and should be used every day, first removing ink or vegetable stains with acid.

A good freckle lotion for the cure of freckles, tan, or sun-burned face or hands is made thus: Take half a pound of clear ox-gall, half a dram each of camphor and burned alum, one dram of borax, two ounces of rock-salt, and the same of rock-candy. This should be mixed and shaken well several times a day for three weeks until the gall becomes transparent; then strain it very carefully through filtering-paper, which may be had of the druggist. Apply to the face during the day and wash off at night.

A very agreeable dentifrice for good teeth is made from an ounce of myrrh in fine powder, and a little powdered green sage mixed with two spoonfuls of white honey. A druggist will make up the compound, and the teeth should be washed with it every morning and night.

Toilet Mats.—Very pretty and useful toilet mats may be made of white enameled cloth, cut in sizes or shapes to suit the fancy. Punch small holes an eighth of an inch from the edge and the same distance apart. Into these crochet a border of colored split zephyr, using white knitting cotton of suitable size for the outer scallop, which should be edged with worsted.

Tomatoes (Baked).—Wash the tomatoes, take out the seed, make a dressing of crumbs of bread and onions chopped fine; add salt, butter and pepper. Bake and serve hot.

Tomatoes (Stewed).—Scald the tomatoes with hot water, take off the skins, put them in an earthen vessel, strain off the water, and add butter, salt and pepper to taste.

Tomatoes—how to keep.—Tomatoes picked when just ripe, and with a portion of the stems retained, and at once covered with a brine composed of a teacup of salt dissolved in a gallon of water, can be kept nearly all the year without noticeable loss of freshness of taste.

Tomatoes—to can.—Place thoroughly ripe and sound tomatoes, a few at a time, in a kettle of boiling water. As soon as the skins crack, remove and peel the fruit, cutting out the hard stem part. Put the tomatoes iuto a porcelain or granite-lined kettle and boil steadily until the watery juice has evaporated. Add for each gallon one heaping tablespoonful of salt, and one-half teaspoonful of cayenne pepper. Dip a coarse cloth in hot water, remove the rubber from the jar, dip it in hot water, and replace it on the jar, lightly wring your cloth, wrap it around the jar, set it in a pail or basin, with the surplus corners of the cloth under the jar, insert the canning funnel in the mouth of the jar, and with a common water dipper, fill the jar full of the boiling fruit. Put on the cover, screw it down tightly, and set the

jar on a dry cloth, out of the draft to cool. When nearly cold, tighten the cover down once more.

I keep my fruit in a cool, dark, dry cellar, in a board cupboard, resting on the ground. I have put up tomatoes after the foregoing rule for seven or eight years, and do not remember losing a single jar. I have always considered them one of the easiest of fruits to keep.

Tomatoes—how to grow in cities.—One of my neighbors informed me of his success in raising tomatoes, as follows: First, he filled a barrel nearly full of rich earth (I should think scrapings of the city streets would be good), placed one tomato plant in the center of it, covered the head of the barrel with a cloth, allowing the plant to grow through the cloth, set a pan or some measure with a small hole in the bottom on one side of the barrel, and fill the pan with water every morning; enough leaked into the barrel to supply the plant, the cloth keeping it from drying up. My informant said he raised enough from one plant to supply a family of four persons all the tomato season. I should think the above plan could be made practical on the sunny side of many city houses.

Tomatoes—the medicinal properties of.—To many persons there is something unpleasant, not to say offensive, in the flavor of this excellent fruit. It has, however, long been used for culinary purposes in various countries of Europe. Dr. Bennet, a professor of some celebrity, considers it an invaluable article of diet, and ascribes to it very important medicinal properties. He declares, first, that the tomato is one of the most powerful deobstruent of the *materia medica;* and that, in all those affections of the liver and other organs where calomel is indicated, it is probably the most effective and least harmful remedial agent known in the profession; second, that a chemical extract can be obtained from it which will altogether supercede the use of calomel in the cure of diseases; third, that he has successfully treated diarrhœa with this article alone. That when used as an article of diet, it is almost a sovereign remedy for dyspepsia and indigestion.

Tonic.—The following is the tonic used by reformed drunkards to restore the vigor of the stomach: Take of gentian root, half an ounce; valerian root, one dram; best rhubarb root, two drams; bitter orange peel, three drams; cardamon seeds, half an ounce, and cinamon bark, one dram. Having bruised all the above together in a mortar (the druggist will do it if requested), pour upon it one and a half pints of boiling water and cover up close; let it stand till cold; strain, bottle, and cork securely; keep it in a dark place. Two tablespoonfuls may be taken every hour before meals, and half that quantity whenever the patient feels that distressing sickness and prostration so generally present for some time after alcoholic stimulants have been abandoned.

Tonic Aperient.—Epsom salts, one ounce; diluted sulphuric acid, one dram; infusion of quassia chips, half an imperial pint; compound

tincture of rhubarb, two drams. Half a wineglassful for a dose, twice a day.

Toothache Remedies.—1. As toothache is nowadays an inevitable accompaniment of teeth, it is well to know what to do for it. Oil of cloves on a bit of cotton wool is good to insert in the cavity and after a little, when it seems to lose its virtue in that particular place, it is well to mix it with an equal quantjty of oil of cinnamon, oil of peppermint, or creosote. It is best to swallow as little as possible of these fiery liquids; therefore the cotton should be pressed quite dry before applying to the aching nerve. It sometimes occurs that the pain in that special tooth will stop, but a sound one, or the ear or temple will ache harder than the decayed tooth. This plainly shows that neuralgia, and medicine are needed which will quiet the nerves before relief can be expected, although temporary ease may be obtained by applying to the face a mustard plaster or a succession of cloths wrung from hot water, or, better still, a solution of hops and vinegar, or as some people advise, a warm and moist buckwheat cake, well sprinkled with cayenne pepper.

2. The mother whose child suffers from toothache must find a corner in the medicine chest for a vial of powdered alum saturated with sweet spirits of niter. This mixture put in the cavity, if there is one, or rubbed on the gum, if there is not, will give immediate ease.

3. The worst toothache, or neuralgia coming from the teeth, may be speedily cured by the application to the defective tooth of a bit of cotton saturated with ammonia.

4. A little horseradish scraped and laid on the *ærisi* of the side affected, will in many cases give speedy relief. Another way is to place a little scraped horseradish in the mouth, or the tooth, and just around the gum. It relieves rheumatic pains in the gums and face also. The mouth may afterward be rinsed with a little camphorated water, luke-warm.

5. Six parts of sal volatile and three of laudanum, mixed, Apply to the tooth with lint.

6. Powdered gum camphor, one ounce; chloral hydrate, one ounce. Rub them together in a wedgewood mortar until they liquefy. Apply to the cavity on a small piece of cotton.

Tooth-bleeding—to stop.—For bleeding at cavity of extracted tooth: Pack the alveolus full and firmly with cotton wet with alum water.

Tooth Powders.—1. One dram of pulverized charcoal, one dram of pulverized orris root, one dram of pulverized castile soap, six grains of pulverized camphor, and a sufficient quantity of alcohol. Powder the soap, then mix in the camphor reduced to a stiff paste with alcohol, then add the orris root and charcoal. If it is liked, bergamot or oil of sassafras can be added as a flavor.

2. Take one-half ounce of powdered chalk, one-half ounce of cream of tartar, one dram of powdered myrrh, one dram of orris root, and

two drams of powdered bark. Mix all together and bottle it, keeping it closed.

3. Burn some rock alum, beat it in a mortar, and sift it fine; then take some rose-pink, mix well together to make it of a pale red color; add a little powder of myrrh, and put into bottles for use.

4. Six ounces prepared chalk, one-half ounce cassia powder, one ounce orris; mix well. Put in small pots and label.

Tortoise Shell—to solder.—Bring the edges of the pieces of shell to fit each other, observing to give the same inclination or grain to each, then secure them in a piece of paper, and place them between hot irons or pincers; apply pressure, and let them cool. The heat must not be so great as to burn the shell, therefore try it first on a white piece of paper.

Towel—to fringe.—Towels are fringed by raveling out a little of the edges and loosely sewing over the threads which end the fringe. Many people prefer this mode to hemming them.

Transparencies on Silk.—In order to prepare a piece of silk for painting upon, let it be stretched in a frame, and then washed with strong alum water. Let it dry thoroughly after this, and then apply a wash of isinglass dissolved in water. This will give a body to the silk and prevent the colors from running into each other. The better the quality of silk—that is, the closer the texture—the more easily may you paint upon it. Next draw the design upon the silk with a crayon or charcoal, and paint with transparent colors mixed in oils or varnish. For painting screens which need not be transparent, use body colors, either water or oils, varnishing over when dry with white varnish.

Trappers' and Anglers' Secret for Game and Fish.—A few drops of oil of anise, or oil rhodium, on any trapper's bait will entice any wild animal into the snare trap. India cockle mixed with flour dough and sprinkled on the surface of still water will intoxicate fish, rendering them insensible; when coming up to the surface they can be lifted in a tub of fresh water to revive them, when they may be used without fear. Fish may also be caught in large numbers during the winter season by watching them through the ice and striking it with a mallet directly over where they happen to be. The shock stuns them, and they will rise, belly upward, toward the surface, when they are easily secured by breaking a hole in the ice.

Trap—for rats and mice.—Rats and mice will go into a trap much more readily if a piece of looking-glass is put in any part of the trap where they can see themselves. They are social little creatures, and where they can see any of their tribe, there they will go.

Trees—to prevent mildew on.—The best preventive against mildew is to keep the plant subject to it occasionally syringed with a decoction of elder leaves, which will prevent the fungus growing on them.

Trees—to ascertain the height.—To ascertain the height of an object a peculiar method of measurement is in use among the Isthmus

Indians. In measuring the height of a tree, for instance, a man proceeds from its base to a point where, on turning the back toward it, and putting the head between the legs, he can just see the top; at the spot where he is able to do this he makes a mark on the ground, and then paces the distance to the base of the tree; this distance is equal to the height.

Tree of Lead.—Dissolve an ounce of sugar of lead in a quart of clean water, and put it into a glass decanter or globe. Then suspend in the solution, near the top, a small piece of zinc of an irregular shape. Let it stand undisturbed for a day and it will begin to shoot out into leaves and apparently to vegetate. If left undisturbed for a few days it will become extremely beautiful; but it must be moved with great caution. It may appear to those unacquainted with chemistry that the piece of zinc actually puts out leaves; but this is a mistake, for, if the zinc be examined, it will be found nearly unaltered. This phenomenon is owing to the zinc having a greater attraction for oxygen than the lead has; consequently, it takes it from the oxyde of lead, which reappears in its metallic state.

Trichina.—Trichina is the term applied to a minute, slender and transparent worm, scarcely one-twentieth of an inch in length, which has recently been discovered to exist naturally in the muscles of swine, and is frequently transferred to the human stomach when pork is used as food. Enough of these filthy parasites have been detected in half a pound of pork to engender thirty millions more, the females being very prolific, each giving birth to from sixty to one hundred young, and dying soon after. The young thread-like worm at first ranges freely through the stomach and intestines, remaining for a short time within the lining membrane of the intestines, causing irritation, diarrhea and sometimes death, if present in sufficient numbers. As they become stronger, they begin to penetrate the walls of the intestines in order to effect a lodgment in the voluntary muscles, causing intense muscular pain and severe enduring cramps, and sometimes tetanic symptoms. After four weeks migration they encyst themselves permanently on the muscular fiber, and begin to secrete a delicate sac which gradually becomes calcareous. In this torpid state they remain during the person's lifetime.

Tricopherous for the Hair.—Take of pure castor oil six ounces; alcohol (ninety-five per cent.), ten ounces; oil bergamot, 1 dram; oil lavender, one dram. Shake well together. This is a very agreeable and most excellent preparation for the hair, serving to soften it, stimulate its growth and keep it glossy.

Tripe for Convalescents.—Take about one pound of fresh (dressed) tripe; wash it in cold water and cut it in square pieces; take out nearly all the fat; put it into a bright stew-pan, with half a teaspoonful of salt, the same of sifted sugar and of fresh-made mustard, and a pint of milk; boil up slowly, skim, and then simmer gently for three hours; skim and stir frequently to prevent the tripe burning to the bottom; mix a small desert-spoonful of Oswego flour with a

wineglassful of cold milk, and stir in; simmer five minutes; take up the tripe, place on a hot dish, pour the sauce over, and serve immediately.

Troches (Brown's Bronchial).—Take one pound of pulverized extract of licorice; one pound and a half of pulverized suzar; four ounces of pulverized cubebs; four ounces of pulverized gum arabic; one ounce of pulverized extract conium. Mix.

Troches (Cough).—One ounce Spanish licorice, two ounces refined sugar, two drams finely-powdered gum arabic, and extract opium, one scruple. Beat the whole together with mucilage of gum tragacanth, make into small troches, to be dissolved in the mouth when the cough is troublesome.

Tumors—to remove.—Dr. Simpson introduces a hollow acupuncture needle, or very fine trocar (a surgical instrument in the form of a fine hollow needle) into their tissue, and injects a few drops of some irritant liquid, such as a solution of chloride of zinc, percholorde of iron, or creosote. The effect is to destroy the vitality of the tumors so treated, and admit of separating them.

Turkey's Carcass—how to devil.—Cut all the meat off the carcass and bones, then place these pieces inside the carcass, together with jellied gravy and stuffing, if there is any. Place in a hot pan, which put in a hot oven. Ten or fifteen minutes will suffice to heat it through. Serve it as it comes from the oven, in the carcass, which you can garnish on the outside with celery tops and parsley. Every household should always have on hand some good stock soup, and they can readily have it if they keep fluid beef in the house. This should be reduced to the desired strength, and the carcass of the turkey basted with it while in the oven, which will form a nice gravy.

Turkey—to choose.—In choosing poultry the age of the bird is the chief point to be attended to. An old turkey has rough and reddish legs; a young one smooth and black. Fresh killed, the eyes are full and clear, and the feet moist. When it has been kept too long, the parts about the vent begin to wear a greenish, discolored appearance.

Turkeys—to fatten.—An old turkey-raiser gives an account of an experiment in fattening turkeys, as follows: Four turkeys were fed on meal, boiled potatoes, and oats. Four others of the same brood were also at the same time confined in another pen and fed daily on the same article, but with one pint of very finely pulverized charcoal in their pen. The eight were killed on the same day, and there was a difference of one and one-half pounds each in favor of the fowls which had been supplied with charcoal, they being much the fatter, and the meat being greatly superior in point of tenderness and flavor.

Turkey—to roast.—After thoroughly cleaning and singeing with a lighted newspaper, prepare a stuffing of pounded crackers, salt, pepper, butter, white of eggs, sage, and sweet marjoram; fill the turkey

and sew it up tighly; rub it with salt and flour; pour half a pint of water into the pan; put in the turkey, and let it roast gradually at first. The wings and legs should be tied down tightly to the body A large turkey of twelve or fourteen pounds will require four hours gentle roasting and constant basting with flour and water. Boil the heart, liver and gizzard in a little water until tender; mash the liver and slice thin the heart and gizzard; add all these to the gravy in the saucepan; thicken a little with flour and season with salt and pepper. Serve with cranberry jelly and oyster sauce.

Turpentine—how to use.—When turpentine is to be used as an outward application, after the manner of a poultice, to allay pain or inflammation, it should be sprinkled upon a piece of flannel which has been dipped in boiling water, and wrung out as quickly as possible to preserve the heat.

Twist Drill—to forge.—It is necessary to forge a flat blade similar to a flat drill, and then twist this blade into the resemblance required; then, with a light hammer, and careful blows, hammer the twisted edges so that they will be thicker than the central line of the tool. This will give greater strength and a better drill, and to cut well, the central line or cutting point must be made quite thin. Be careful to get the same twist at the point of the drill as upon the body of the drill. The inexperienced often leave the point straight like a flat drill.

Typhoid—specific for.—Coffee is said, by Doctor Guillasse, of the French navy, to be almost a specific in the early stages of typhoid fever. He gives to adults two or three tablespoonfuls of strong black coffee every two hours, alternating with one or two teaspoonfuls of claret or Burgundy wine. The beneficial effect is immediate. A little lemonade or citrate of magnesia should be given daily, and after a while quinine.

Ulcers—to cure.—Here is a recipe that will cure any sore on man or beast that has ulcerated. Take two and one-half drams of bluestone, four drams alum, six drams loaf sugar, one dram sugar of lead, one tablespoonful honey. Put all into a bottle, put in one pint of vinegar; shake it three or four times a day, until they are dissolved and it is ready for use. Pour some of it out and add water when you first apply to any sore, as it makes it smart at the first application; apply three times a day.

Upholstery (Faded)—to restore.—Beat the dust out thoroughly, and afterward brush them; then apply to them a strong lather of castile soap, by means of a hard brush; wash the lather off with clear water, and afterward wash them with alum water. When dry, the colors will be restored to their original freshness. When the colors have faded beyond recovery, they may be touched with a pencil dipped in water-colors of a suitable shade, mixed with gum-water.

Uterine Hemorrhage—unfailing cure.—Sugar of lead, ten grains; ergot, ten grains; opium, three grains; ipecac, one grain; all pulver-

ized, and well mixed. Dose, ten to twelve grains; given in a little honey or syrup.

In very bad cases after childbirth, it might be repeated in thirty minutes, or the dose increased to fifteen or eighteen grains; but in cases of rather profuse wasting, repeat it once at the end of three hours, or as the urgency of the case may require.

In every case of female debility make a liberal use of iron, as the want of iron in the system is often the cause of the trouble. Mix fine iron filings with as much ground ginger. Dose, half of a teaspoon three times daily in a little honey or molasses, increasing or lessening the dose to produce a blackness of the stools. Continue this course until well.

Urine—stoppage of.—Symptoms: Frequent attempts to urinate, looking round at his sides, lying down, rolling and stretching. To cure, take one-half pound of hops, three drams of oil of camphor; grind and mix. Make this into three pills. Give one every day, with a drench made of a small spoonful of saltpeter and two ounces of water. This will cure as a general thing.

Vanilla Extract—to make.—1. For extract of vanilla use four ounces of vanilla beans, two ounces of Tonka beans, four ounces of sugar, one-half pint of French brandy, two ounces of glycerine, and three and one-half pints of dilute alcohol. Split the vanilla beans, and cut them in fine pieces, and powder with four ounces of white sand. Powder the Tonka without sand; mix them all together, and filter through filter paper. The vanilla is a very complicated extract to make, and very few outside of a drug-store could make it, but you have the recipe.

2. For vanilla, I take for an eight ounce bottle eight Tonka beans, split them in two, soak in two tablespoonfuls of warm water over night, and fill up with alcohol. It takes longer to make, but it will last a long time.

Vanities.—Beat two eggs light; pinch of salt, teaspoonful of flavoring, add enough flour to make a stiff dough, roll thin on a sheet of brown paper cut in squares about two inches wide by three in length, fry quickly in hot lard—they are scarcely in before they must be turned or taken out—sprinkle with powdered sugar. Nice for tea or dessert.

Varnish and Starch Gloss (Aqueous)—to prepare.—It is most simply and rapidly prepared by shaking a saturated solution of borax with powdered shellac without heat. One part of shellac is soluble in two parts of a saturated solution of borax, after frequent shaking during two or three days. In three parts, however, it is easily soluble. The bleached shellac must be preserved under water, and must be dissolved immediately after being powdered; for, if it is allowed to be exposed to the air in a powdered condition for several days, it will either not dissolve at all, or only with great difficulty. If a higher temperature than fifty or sixty degrees Centigrade is used in preparing the varnish, it is apt to assume a faint reddish color, the cause of

which I have vainly tried to ascertain. The finished varnish, however, bears heat very well. Now this varnish may not only be used for rendering pictures, maps, prints, etc., glossy, but it is a most excellent starch-gloss, and its preparation would, therefore, be also remunerative for many pharmacists. In fact this varnish is much more appropriate and serviceable for this purpose than all other known commercial starch glosses.

Varnish for Bookbinders.—Shellac, eight parts; gum benzoin, three parts; gum mastic, two parts; bruise and digest in alcohol, forty-eight parts; oil of lavender, one-half part; or, digest shellac, four parts; gum mastic, two parts; gum dammer and white turpentine, of each, one part; with alcohol (ninety-five per cent.) twenty-eight parts.

Varnish for Boilers.—Asphaltum dissolved in turpentine.

Varnish (Black) for Chip and Straw Hats.—Best alcohol, four ounces; pulverized black sealing-wax, one ounce; put them into a phial, and put the phial into a warm place, stirring or shaking occasionally until the wax is dissolved. Apply it when warm before the fire or in the sun. This makes a beautiful gloss.

Varnish (Black) for Coal Buckets.—Asphaltum, one pound; lamp-black, one-quarter pound; resin, one-half pound; spirits of turpentine, one quart; Dissolve the asphaltum and resin in the turpentine, then rub up the lamp-black with linseed oil, only sufficient to form a paste, and mix with the other. Apply with a brush.

Varnish for Faded Rubber Goods.—Black Japan varnish diluted with a little linseed oil.

Varnish for Fancy Work.—An excellent varnish for hanging baskets, or for leather work, is made of half a pound of asphaltum in one pint of turpentine. Let it stand over night before using. Card-receivers and watch-receivers can be made of butternut shells and varnished with this preparation. It is useful also for cones and acorns.

Varnish for Frames, etc.—Lay the frames over with tin or silver foil by means of plaster of Paris, glue or cement of some kind, that the foil may be perfectly adherent to the wood; then apply your gold lacquer varnish, which is made as follows: Ground tamarac, one pound; powdered gamboge, one and a half ounces; powdered sandarac, three and a half pounds; powdered shellac, three-quarters of a pound; spirits of wine, two gallons; dissolve and strain; then add turpentine varnish, one pint, and it is ready for use.

Varnish (French) for Boots and Shoes.—Ingredients: Three-quarters of a pint of spirits of wine, five pints of any cheap white wine, one-half pound of gum senegal powdered, six ounces of loaf sugar, two ounces of powdered galls, four ounces of green copperas, one-half pint of strong decoction of logwood. Dissolve the sugar and gum in the white wine, and afterwards strain it into a pipkin, add the spirits of wine; set the pipkin over a slow fire; let the contents get quite hot, but be very careful that it does not boil. Put in the galls,

copperas, and logwood, and continue stirring it on the fire for five minutes. When somewhat cool, pass it through a muslin strainer, and bottle it for use. Apply it to the leather with a soft brush, and leave it dry.

Varnish for Harness.—Alcohol, one gallon; white turpentine, one and a half pounds; gum shellac, one and a half pounds; Venice turpentine, one gill. Let them stand by the stove till the gums are dissolved, then add sweet oil, one gill, and color it if you wish with lampblack, two ounces. This will not crack like the old varnish.

HARNESS OIL.—Neat's-foot oil, one gallon, lampblack, four ounces. Mix well.

Varnish (Waterproof) for Harness.—India-rubber, one-half pound; spirits of turpentine, one gallon; dissolve to a jelly; then take hot linseed oil equal parts with the mass, and incorporate them well over a slow fire.

Varnish for Iron and Steel.—A cheap black varnish for polished iron and steel is made with ten parts of oil of tar and one part of sulphur. This mixture, of a deep brown color, is applied with a fine hair brush, and then dried at a gas flame until the varnish becomes quite black.

Varnish (Jet Black).—To make a jet black varnish that can be used for furniture or for small wood-handles, that will make them smooth and shining and hard and solid, so that they will not get dim by handling or lose their gloss, take of asphaltum, three ounces; boiled lard, four quarts; burnt umber, eight ounces, and enough oil of turpentine to thin. The three first must be mixed by the aid of heat, and the turpentine gradually added (out of doors and away from fire) before the mixture has cooled. The work (dry) is given several coats, each being hardened in a japanner's oven. The last coat may be rubbed down, first with tripoli applied on a soft cloth, then with a few drops of oil.

Varnish (Brilliant French) for Leather.—Spirits of wine, three-quarters of a pint; vinegar, five pints; gum senegal in powder, one-half pound; loaf sugar, six ounces; powdered galls, two ounces; green copperas, four ounces. Dissolve the gum and sugar in the water; strain, and put on a slow fire, but don't boil; now put in the galls, copperas, and the alcohol; stir well for five minutes; set off; and when nearly cool strain through flannel, and bottle for use. It is applied with a pencil brush. Most superior.

Varnish (Crystal) for Maps, etc.—Canada balsam, one ounce; spirits of turpentine, two ounces; mix together. Before applying this varnish to a drawing or colored print, the paper should be placed on a stretcher, and sized with a thin solution of isinglass in water, and dried. Apply with a soft camel's-hair brush.

Varnish for Maps, Drawings, etc.—Boil parchment cuttings in water, in a glazed earthen vessel, till they produce a very clear size; strain it, and keep it till wanted; then give the work two coats of the

size, passing the brush quickly over the work so as not to disturb the colors.

Veneers—dyes for.—A FINE BLACK.—Put six pounds of logwood chips into your copper, with as many veneers as it will hold without pressing too tight; fill it with water, let it boil slowly for about three hours; then add one-half pound of powdered verdigris, one-half pound copperas, bruised gall nuts, four ounces; fill the copper up with vinegar as the water evaporates; let it boil gently two hours each day till the wood is dyed through.

A FINE BLUE.—Put oil of vitriol, one pound, and four ounces of the best powdered indigo in a glass bottle. Set it in a glazed earthen pan, as it will ferment. Now put your veneers into a copper or stone trough; fill it rather more than one-third with water, and add as much of the vitriol and indigo (stirring it about) as will make fine blue testing it with a piece of white paper or wood. Let the veneers remain till the dye has struck through. Keep the solution of indigo a few weeks before using it; this improves the color.

FINE YELLOW.—Reduce four pounds of the root of barberry to dust by sawing, which put in a copper or brass trough; add turmeric, four ounces; water, four gallons; then put in as many white holly veneers as the liquor will cover. Boil them together three hours, often turning them. When cool, add aquafortis, two ounces, and the dye will strike through much sooner.

BRIGHT GREEN.—Proceed as in the previous recipe to produce a yellow; but, instead of aquafortis, add as much of the vitriolated indigo (see above, under blue dye) as will produce the desired color.

BRIGHT RED.—Brazil dust, two pounds; add water, four gallons. Put in as many veneers as the liquid will cover; boil them for three hours, then add alum, two ounces; aquafortis, two ounces; and keep it luke-warm until it has struck through.

PURPLE.—To two pounds of chip logwood and one-half pound of Brazil dust, add four gallons of water; and after putting in your veneers, boil for three hours; then add pearlash, nine ounces, and alum, two ounces; let them boil two or three hours every day till the color has struck through.

ORANGE.—Take the veneers out of the above yellow dye while still wet and saturated; transfer them to the bright red dye till the color penetrates throughout.

Varnish (Shellac.)—Buy at almost any druggist's or paint store about ten cents' worth of gum shellac; break it up in pieces; put it in a wide-mouthed bottle; cover it with good alcohol, and let it stand until you have a dark brown mixture about as thick as New Orleans molasses. If you find it too thick to make a fine, clear varnish, when applied with a brush, you may dilute it by pouring in a little more alcohol and shaking the bottle. The advantage of using this preparation is that it gives a fine soft gloss instead of the hard shiny effect of most other varnishes.

Varnish (Scratches in)—to remove.—Scratches in varnish will en-

tirely disappear if a coarse cloth that has been well saturated with linseed oil be laid over them. This simple remedy is invaluable to those who have the care of carriages and highly polished furniture, etc.

Varnish (Black)—for stoves.—Melt half a pound of asphaltum, and add to it one-fourth of a pint of linseed oil, and one pint of turpentine. This quantity will be enough for four grates. If it be found too thick as it gets toward the bottom of the bottle, add a little more turpentine. It is for the black stoves, which must be washed clean of dirt and blackened, and, when dry, varnished with a brush.

Varnish for Violins, etc.—1. Rectified spirits of wine, one-half gallon; add six ounces of gum sandarac, three ounces of gum mastic and one-half pint of turpentine varnish; put the above in a tin can by the stove, frequently shaking till well dissolved; strain and keep for use. If you find it harder than you wish, thin with more turpentine varnish.

2. Heat together at a low temperature two quarts of alcohol, one-pint of turpentine varnish, and one pound of clean gum mastic; when the latter is thoroughly dissolved, strain through a cloth.

Varnish for White Woods.—Dissolve three pounds of bleached shellac in one gallon of spirit of wine; strain, and add one and one-half more gallons of spirit. If the shellac is pure and white, this will make a beautifully clear covering for white wooden articles.

Varnish (Waterproof).—Gum copal varnish applied to soles of boots and shoes, and repeated as it dries until the pores are filled and the surface shines like polished mahogany, will make the sole waterproof, and it lasts three times longer for the application.

Veal Loaf.—Chop fine a leg or loin of veal, roll one dozen crackers, put half of them in the veal, with two eggs, pepper, salt, and butter size of an egg; mix all together and make into a solid form; then take the crackers that are left and spread smoothly over the outside; bake three-quarters of an hour and eat cold.

Veal—to select.—Veal should be delicately white, though it is often juicy and well flavored when rather dark in color. Butchers, it is said, bleed calves purposely before killing them, with a view to make the flesh white, but this also makes it dry and flavorless. On examining the loin, if the fat enveloping the kidney be white and firm-looking, the meat will probably be prime and recently killed. Veal will not keep so long as an older meat, especially in hot or damp weather; when going, the fat becomes soft and moist, the meat flabby and spotted, and somewhat porous, like sponge. Large, overgrown veal, is inferior to small, delicate, yet fat veal.

Vegetables and Fruits—to grow to an enormous size, etc.—A curious discovery has recently been made public in France, in regard to the culture of vegetable and fruit trees. By watering with a solution of sulphate of iron, the most wonderful fecundity has been attained. Pear trees and beans which have been submitted to this treatment have nearly doubled in the size of their productions, and a noticeable improvement has been remarked in their flavor. Dr. Be-

court reports that while at the head of an establishment at Enghein, or the sulphurous springs, he had the gardens and plantations connected with it watered, during several weeks of the early spring, with sulphurous water, and that not only the plantation prospered to a remarkable extent, but flowers acquired a peculiar brilliancy of coloring and healthy aspect which attracted universal attention.

Veins of the Leg (Enlarged).—Apply firmly strips of leather spread with soap plaster. Generally it is better to support the whole limb with a strong calico bandage, which should be applied before getting out of bed. It is well to use friction in connection with iodine ointment.

Velvet Cream.—Half an ounce of isinglass dissolved in a teacupful of white wine, one pint of cream, the juice of a large lemon. Sweeten the cream to your taste. When the isinglass is dissolved, add the lemon juice and wine to the cream, and pour it into a mold.

Velvet—to raise the pile of.—1. When the pile is pressed down, cover a hot smoothing-iron with a wet cloth, and hold the velvet firmly over it; the vapors arising will raise the pile of the velvet with the assistance of a light whisk.

2. Where velvet has been crushed, hold the wrong side over a basin of quite boiling water, and the pile will gradually rise. Do not lose patience, for it takes a considerable time, but the result is marvelous.

Velvet—to remove wax from.—Take a crumby wheaten loaf, cut it in two, toast it before the fire, and, while very hot, apply it to the part spotted with wax. Then apply another piece of toasted bread hot as before, and continue this application until the wax is entirely taken out. This process applies to all colors except crimson.

Ventilation.—As houses are generally made it is better to draw down the upper sash of a window, for the reason that the warmest air, particularly during the winter, collects near the ceiling and injurious matters are carried up into it from the floor. Drawing down the sash will afford a double means of ventilation—permitting the warm and noxious air at the top to escape and the outer air to enter at the bottom of the sash through the lower one. When the weather is cold it is not necessary that the upper sash be lowered much; an inch or two would be sufficient for a room of the average size; that is, fourteen or fifteen feet square. A room which is used for the general assembling of the family—what is called the living room—should not be less than that in dimension.

Vegetable Substitute for Calomel.—Jalap, one ounce; senna, two ounces; peppermint, one ounce (a little cinnamon if desired), all pulverized and sifted through gauze. Dose, one teaspoonful put in a cup with two or three spoonfuls of hot water, and a good lump of white sugar; when cool, drink all; to be taken fasting in the morning; drink freely; if it does not operate in three hours, repeat one-half the quantity; use instead of calomel.

Vermifuge (Fahnestock's).—Castor oil, oil of worm seed, each

one ounce; oil anise, one-half ounce; tincture myrrh, one-half dram; oil turpentine, ten minims. Mix.

Vermifuge Lozenges.—Santonine, sixty grains; pulverized sugar, five ounces; mucilage of gum tragacanth, sufficient to make into a thick paste, worked carefully together, that the santonine shall be evenly mixed throughout the whole mass; then if not in too great a hurry cover up the mortar in which you have rubbed them, and let stand from twelve to twenty-four hours to temper; at which time they will roll out better than if done immediately; divide into a hundred and twenty lozenges. Dose, for a child one year old, one lozenge, night and morning; of two years, two lozenges; of four years, three; of eight, four; of ten years or more, five to seven lozenges; in all cases to be taken twice daily, and continuing until the worms start on a voyage of discovery.

Vermifuge (Swaim's).—Worm-seed, two ounces; valerian, rhubarb, pink-root, white agaric, of each, one and one-half ounces; boil in sufficient water to yield three quarts of decoction, and add to it thirty drops of oil of tansy, and forty-five drops of oil of cloves, dissolved in a quart of rectified spirits. Dose, one teaspoonful at night.

Vermin—how to free the house from.—We will begin with the most offensive, the bed-bug. Scores of methods have been tried to rid the house of these, and in some cases there would seem no remedy, when beds, bedding, walls, and even furniture are infested; yet patience and perseverance has effected what seemed an impossibility.

When closets and floors are the lurking places, use strong sassafras tea, dashing it into every corner and crack, under the bare boards, into the floor seams, and every crevice. Let it lie in one place while doing another, and do not be too careful in wiping off the surface. After doing this fill up all the cracks or holes with soap or putty.

Should this not prove effectual, as it generally does, after one or two applications, try carbolic acid and water, one tablespoonful of acid to four quarts of water, or a little stronger if used only for holes and cracks. This was used in South America (every two weeks) to keep out the very troublesome insects there.

For bedsteads do not rely on salt and water, coal oil, red precipitate and lard, except as temporary remedies. Instead try corrosive sublimate mixed with carbolic acid. If this is used thoroughly it will last for several years, especially if the bed and bedding have been well fumed with the carbolic acid. Coal oil mixed with the oil used in lubricating machinery is also excellent, as it retains the offensive properties of the coal oil, which evaporates too freely when used by itself. Still, though this mixture has proved effectual in one instance, carbolic acid and corrosive sublimate have stood the test of years. Carbolic soap would be of good service in stopping up cracks and crevices.

layers, or cut up into fragments, each piece of which, if placed upon fresh syrup, will rapidly grow and change the liquor into vinegar. The vinegar should be allowed to settle and be strained before it is used.

Vinegar for the Sick-room.—There is a French legend that during the plague at Marseilles a band of robbers plundered the dying and the dead without injury to themselves. They were imprisoned, tried, and condemned to die, but were pardoned on condition of disclosing the secret whereby they could ransack the houses infected with the terrible scourge. They gave the following recipe, which makes a delicious and refreshing wash for the sick-room. Take of rosemary, wormwood, lavender, rue, sage, and mint, a large handful of each; place in a stone jar, and pour over the whole one gallon of strong cider vinegar; cover closely, and keep near the fire for four days; then strain, and add one ounce of powdered camphor. Bottle and keep tightly corked. The vinegar is very aromatic, cooling and refreshing in the sick-room, and is of great value to nurses.

Vinegar—to strengthen.—Freeze it and remove the ice which forms on the surface—the water of the vinegar alone freezes, leaving the acute acid in solution in the remaining water.

Vinegar (White Wine).—Mash up twenty pounds raisins, and add ten gallons of water; let it stand in a warm place for one month, and you will have pure white wine vinegar. The raisins may be used a second time the same way.

Visiting the Sick.—Do not visit the sick when you are fatigued, or in a state of perspiration, or with the stomach empty—for in such conditions you are liable to take the infection. When a disease is very contagious, take the side of the patient which is near to the window. Do not enter the room the first thing in the morning before it has been aired; and when you come away take some food, change your clothing immediately, and expose the latter to the air for some days. Tobacco smoke is a fine preventive of malaria.

Violet Powder.—Wheat starch, six parts by weight; orris-root powder, two. Having reduced the starch to an impalpable powder, mix thoroughly with the orris-root, and then perfume with attar of lemon, attar of bergamot and attar of cloves, using twice as much of the lemon as either of the other attars.

Vomiting in Pregnancy—to cure.—Mix one dram of carbonate of magnesia; one-half ounce tincture of colombo; five and one-half ounces peppermint water. Dose, one tablespoonful three times a day.

Voice—to improve.—Beeswax, two drams; copaiba balsam, three drams; powder of liquorice root, four drams; melt the copaiba balsam with the wax in a new earthen pipkin; when melted, remove them from the fire, and mix in the powder; make the pills of three grains each. Two of these pills to be taken occasionally, three or four times a day. Very best known.

Vulcanite Emery Wheels.—Use a compound of India rubber and emery, as little of the former as will suffice to hold the particles

of emery together. The materials must be thoroughly incorporated together, then rolled into sheets, cut into wheels of the desired size and pattern, pressed into the iron molds, and vulcanized or cured by being subjected to a high degree of steam heat for several hours, making it almost as hard as cast iron.

Wafers (Pulmonic).—Lump sugar, licorice, and starch, of each two parts; gum, ten parts; squills and ipecacuanha, of each five parts; lactucarium, two parts. Mix, and divide into eight grain lozenges.

Wafers.—Use equal parts water and "A" oatmeal, and make it as thin as you can shake it out on the bottom of the pan, so that when it is done it will not be thicker than a knife-blade anywhere, and in most places you can see daylight through it. Bake it very slowly until it is quite dry, watching it that it may not scorch. In taking it out it will probably break into many fragments, but they will be delicious ones—not shapely for the table, but so temptingly savored that any delicate person who can eat at all will find them satisfying, nourishing, and easily digested—far better than the standard sick dish called gruel. As for the well folks, put your waters out of their way if you expect to find any of them for the invalid's next meal.

Waffles.—One quart of sweet or sour milk, two eggs, two-thirds of a cup of butter, one-half a teaspoonful of salt, three teaspoonfuls of baking powder; flour enough to make a nice batter. If you use sour milk leave out the baking powder and use two teaspoonfuls of soda. These are splendid.

Wakefulness—remedy for.—If troubled with wakefulness, follow these rules: Eat nothing hearty after sunset; calm your mind before retiring; go to bed at a regular hour; when you wake, rise and dress at once, no matter how early in the morning; never sleep in the day. These five rules observed will insure sleep.

Wall-paper—how to clean.—Take off the dust with a soft cloth. With a little flour and water make a lump of very stiff dough, and rub the wall gently downward, taking the length of the arm at each stroke, and in this way go around the room. As the dough becomes dirty, cut the soiled part off. In the second round commence the stroke a little above where the last one ended, and be very careful not to cross the paper or to go up again. Ordinary papers cleaned in this way will look fresh and bright, and almost as good as new. Some papers, however—and these most expensive ones—will not clean nicely; and in order to ascertain whether a paper can be cleaned, it is best to try it in some obscure corner, which will not be noticed if the result is unsatisfactory. If there be any broken places in the wall, fill them up with a mixture of equal parts of plaster of Paris and silver sand, made into a paste with a little water; then cover the place with a little piece of paper like the rest, if it can be had.

Walls—to paper.—Before putting fresh paper on walls, the old paper should be removed by wetting it with saleratus water, when it

will fall off easily. The walls should be brushed over with a weak solution of carbolic acid, which will drive away insects and sweeten the walls. The Chinese often remove plaster from the old houses, and replace it with new and are paid for their trouble in the value of the old plaster for fertilizing purposes. This shows how the breaths and various exhalations of the body are absorbed by lime, and gives a hint as to the necessity of neutralizing, as far as possible, these absorbed odors.

Wall-paper—how to hang.—There are many housekeepers who have one or more rooms they would like to re-paper, but are kept from doing as much of this kind of work as they would like on account of the expense of getting a professional paper-hanger to put the paper on. Any one who takes the pains to notice, can soon learn to put on paper as well as the best paper-hanger. In the first place, you can often find among the cheap papers one or more lots that look just as well, and are of as good quality as the more expensive ones. When you have got your paper home, trim off the edge on the right side, as it is better for an inexperienced hand to commence at the left side of a door or window, and go toward the left. When you are ready to begin, make your paste with boiling water, and let it boil about as long as common starch, and it should be no thicker than starch after it is cold. Let it cool and strain it through a common salt sack to take out the lumps. Then take a piece of washing soda as large as a walnut with the hull off, dissolve it in water, and put it in the paste, and you need not use any glue or anything else whatever. Let an assistant hold the paper up the wall, so that it will match with the piece already on, and cut it off the right length, always half an inch short, as it will stretch that much. Lay the paper wrong side up on a large table; let your help hold one end while you put on the paste quickly and evenly with a whitewash brush. Be sure to get every part covered. Take hold of the upper end, while your assistant takes the lower end, fasten it at the top, then sweep it down with a soft broom or brush, pick all windy places with a pin, and pat gently with a soft cloth. If it should become fast at the bottom too soon for the rest, pull it out carefully from the wall and replace it again. Paper put on with washing soda in the paste will not crack and come loose on greasy walls, as it often does without it. Try this plan, and your rooms will look nice and new with but little expense.

Walls—to repair cracks, holes, etc., in.—Equal parts of plaster of Paris and white sand—such as is used in most families for scouring purposes—mixed with water to a paste, applied immediately and smoothed with a knife or flat piece of wood, will make the broken place as good as new. The mixture hardens very quickly, so it is best to prepare but a small quantity at a time.

Walls (Whitewashed)—to make paper stay on.—To make wall-paper stay on whitewashed walls, use one pound of glue, and one-fourth bar of soap, dissolved in six quarts of scalding water. Let it

stand until only blood warm, and apply with a whitewash brush; let it dry thoroughly, and paper.

Walls (Damp)—to cure.—Boil two ounces of grease with two quarts of tar, for nearly twenty minutes, in an iron vessel, and have ready pounded glass, one pound; slaked lime, two pounds; well dried in an iron pot and sifted through a flour sieve; add some of the lime to the tar and glass, to make it the thickness of thin paste, sufficient to cover a square foot at a time, as it hardens so quick. Apply it about an eighth of an inch thick.

Walls—to prevent sound passing through.—Dry saw-dust or spent tan-bark, well dried, is a good and cheap substance to put in a lath and plaster wall, to deaden, as much as possible, sounds proceeding from one room to another. Sand is effectual if the lathing is sufficiently strong to admit of its use.

Walnut Stains—to remove.—The juice of ripe tomatoes will remove the stain of walnuts from the hands without injury to the skin.

Warts—several ways to cure.—1. A much safer remedy for warts than nitrate of silver is sal-ammoniac. Get a piece about the size of a walnut; moisten the warts, and rub the sal-ammoniac well on them every night and morning, and in about a fortnight they will probably disappear. If not, do not despair, but continue the process till they are gone.

2. To remove warts, get a little bullock's gall, and keep it in a bottle; rub a little on the warts two or three times a day, and in a short time they will disappear.

3. Take a small piece of potash, and let it stand in the open air until it slakes; then thicken it to a paste with pulverized gum arabic, which prevents it from spreading where it is not wanted. Apply to warts and corns.

4. The treatment of warts is to pare the hard and dry skin from their tops, and then touch them with the smallest drop of strong acetic acid, taking care that the acid does not run off the wart upon the neighboring skin, for if it does, it will occasion inflammation and much pain. If this practice be continued once or twice daily, with regularity, paring the surface of the wart occasionally when it gets hard and dry, it may be soon effectually cured.

5. Drop a little vinegar on the wart and cover it immediately with cooking soda, or saleratus; put on as much soda as you can pile on and let it remain ten minutes; repeat several times a day, and in three days the wart will be gone. A good remedy for corns also.

6. A most effectual way to cure warts—keep them wrapped in a cloth wet in diluted tincture of thujia; after forty-eight hours pull them out by the roots—a very painless operation. For those living in the country, I would say, make a decoction of arbor vitæ, which is the same thing as thujia.

7. Rub warts until they are green, with a bean leaf, and they will disappear after a few applications.

Washing Compound.—Take two and one-half pounds of bar soap,

cut fine, two ounces of borax, one-half ounce of sal-soda, one-eighth of a gill of spirits of turpentine, and three pints of hot water. Put these in a suitable vessel, and place it on the stove until all is dissolved. When nearly cold put into molds. Directions for using: The night before washing put the clothes to soak in cold water, in which put a little of the compound. In the morning operations are commenced by setting on the stove or furnace the wash-kettle two-thirds full of water; into this put about one-half a pound, more or less, according to the size of the kettle (first dissolve in a little boiling water); then wring out the clothes that have been soaking, and put them into the kettle. By the time that the water is scalding hot the clothes will be ready for taking out. Drain them well; put them into clean cold water, and thoroughly rinse them twice, and they are ready to be hung out. For colored clothes, floors ceilings, etc., use the same as common soap.

Wash for Painting Purposes.—Take a half bushel of unslaked lime and slake it with boiling water; cover it during the process. Strain it and add a peck of salt dissolved in warm water, three pounds of ground rice boiled to a thin paste put in boiling hot, half pound of Spanish whiting and one pound of clear glue dissolved in warm water. Mix and let it stand several days. Keep it in a bottle, and put it on as hot as possible with a brush. It is said to look as well and last as long as oil paint, on wood, brick or stone.

Wash for Barns and Houses.—Water lime, one peck; freshly slaked lime, one peck; yellow ochre in powder, four pounds; burnt umber, four pounds; to be dissolved in hot water and applied with a brush.

Wash for Removing Particles of Zinc or Iron from the Eye.—Muriatic acid, twenty drops, mucilage, one dram; mix with two fluid ounces rose water. Iron or steel particles may be extracted by holding near them a powerful magnet.

Washing Lace Edgings.—Cover a smooth quart bottle with soft, half-worn sheeting, fastened evenly around. Begin at the bottom and wind the lace about it, basting fast at both edges, and being very careful to put the needle through each of the minute loops on the scalloped edge. Soap it well and wash by patting it, then boiling, rinsing and bluing it the same as if it was off the bottle. Dip at last in water containing a little mucilage and dry in the sun. Clip and carefully pull out the basting threads and use without ironing. If neatly basted on, it will look nearly or quite as well as new. When washing fine lace do not use starch at all; in the last water in which they are rinsed put a little fine white sugar, dissolve it thoroughly and the result will be pleasing.

Washing Linens.—1. A tablespoonful of black pepper put in the first water in which gray or buff linens are washed, will keep them from spotting. It will also keep the colors of black and colored cambrics or muslins from running, and does not harden the water. A little gum arabic imparts a gloss to ordinary starch.

2. For washing black or navy blue linens, percales, etc., take two potatoes grated into tepid soft water (first having peeled and washed them), into which put a teaspoonful of ammonia. Wash the goods in this and rinse in cold blue water. Starch will not be needed, and if at all practicable, they should be dried and ironed on the wrong side. It is said that an infusion of hay will preserve the colors of buff linens; an infusion of bran will do the same for brown linens and prints.

Washing Embroidered Handkerchiefs.—To wash a fine cambric handkerchief, embroidered in colored silks, so that the colors will not run, the secret is to wash in a soap lather very quickly, wring thoroughly and then iron, so that it will dry at once. There should be no soaking, and the embroidered corner should be kept out of the water as much as possible. A little alum in the water will make the process more sure.

Washing Colors.—To wash fine and elegant colors, boil some bran in rain-water and use the liquid cold. Nothing can equal it for cleaning cloth and for revivifying effects upon colors.

Washing Hints.—Clothes soaked over night are cleansed with one-half the effort usually applied.

Hard water boiled will readily affiliate with soap. A piece of sal soda or a teaspoonful of unslaked lime would greatly facilitate the assimilating process. A teaspoonful of turpentine boiled with white clothes will add materially to the whitening process. An excellent bluing is made with one ounce of Prussian blue, half an ounce of oxalic acid, and one quart of soft water. A piece of starch polish, the size of a pea, or a teaspoonful of gum arabic solution, a piece of mutton tallow, or a pinch of salt improves starch, and facilitates the ironing process.

Articles of delicate color and texture should be washed in tepid water, slightly tinctured with borax. One tablespoonful of alum, one tablespoonful of salt, dissolved in one gallon of soft water; soak the garment, and rinse with salt and alum. A cloth wetted with ammonia will remove stains made by machine oil. Sour milk, oxalic acid, or ripe tomatoes remove iron rust from white goods. Though ink-stains are best treated with sweet milk, a weak solution of chloride of lime, muriatic acid, or lemon-juice will effectually remove fruit-stains from linen. A compound consisting of equal portions of soft-soap, lemon-juice, and starch, applied with a painter's brush and dried in the open air, will remove mildew or the seared places which come of scorching. A little salt on a flat surface, or beeswax, cleanses the face of smoothing-irons for use. Dip shirt-bosoms in cold water three hours before ironing; fold the back lengthwise through the center; next iron the waistbands and both sides of the sleeve; then iron the collar-band, then place the bosom-board under the bosom and rub with a dampened napkin, smoothing and arranging each plait neatly; then begin at the band and iron downward, with a moderately hot flat-iron, until the bosom is polished and

shining; remove the board, and the result is a bosom without speck or flaw.

Washing Made Easy.—To save your linen and your labor pour on half a pound of soda two quarts of boiling water, in an earthenware pan; take half a pound of soap, shred fine, put it into a saucepan with two quarts of cold water, stand it on a fire till it boils, and when perfectly dissolved and boiling add it to the former. Mix it well, and then let it stand till cold, when it has the appearance of a strong jelly. Let your linen be soaked in water, the seams and any other dirty part rubbed in the usual way and remain till the following morning. Get your wash boiler ready, and add to the water about a pint basin full. When lukewarm put in your linen and allow it to boil twenty minutes. Rinse it in the usual way, and that is all which is necessary to get it clean and keep it in good color. The above recipe is invaluable to housekeepers. Give it a trial.

Washing Fluid.—Take one pound sal-soda half a pound of good stone lime, and five quarts of water; boil a short time, let it settle, and pour off the clear fluid into a stone jug, and cork for use. Soak your white clothes over night in simple water, wring out and soap wristbands, collars, and dirty or stained places; have your boiler half filled with water just beginning to boil; then put in one common teacupful of fluid, stir, and put in your clothes, and boil for half an hour; then rub lightly through one suds only, and all is complete.

Washing Clothes Without Fading.—Wash and peel Irish potatoes, and then grate them into cold water. Saturate the articles to be washed in this potato water, and they can then be washed with soap without any running of the color. I have taken oil out of carpets saturated with this potato water, when simple cold water would make the color run ruinously; have set the color in figured black muslins, in colored merinos, in ribbons and other silk goods. Often the potato water cleanses sufficiently without the use of soap; but the latter is necessary where there is any grease. In such cases (without soap) I take the grated potato itself and rub the goods with a flannel rag. In woolen goods it is necessary to strain the water, else the particles will adhere, but this is not necessary on goods from which they can be well shaken.

Washing Merinos and Silk.—The following directions for washing merinos, lambswool and silk under-clothing may be useful: Use one pound of dissolved soap in four gallons of warm water, in which well rinse the articles to be washed, drawing them repeatedly through the hand; wring them as dry as possible to remove the soap; rinse them again briskly in clean, luke-warm water; wring and stretch them to their proper shape, and dry in open air if possible.

Washing—be grateful for.—Rev. Thomas K. Beecher says: "All men ought to go to the woods and religiously do their own washing and general work—such as sewing, cooking, housekeeping and dish-washing. The work of women is not spoken of sensibly by men until they have done it themselves. Do as I have done—do a wash

of six pieces, and then remember that a woman turns off two hundred pieces in a day. Look at your watch and see how long it takes you. Look at your soap and see how much you have used. Look at your white clothes (handkerchief or towel) and see what you have done or not done, and never again speak harshly of or to a woman on wash-day, nor of laundry work as if it were unskilled labor. Try it. Don't talk. Don't sneer. A sympathetic gentleman having washed two dozen pieces will never change his shirt again without a glow of reverence and gratitude."

Waste-paper for Household Uses.—Few housekeepers have time to blacken their stoves every day, or even every week. Many wash them in either clean water or dish-water. This keeps them clean, but they look very brown. After a stove has been blackened, it can be kept looking very well for a long time by rubbing it with paper every morning. If I occasionally find a drop of gravy or fruit juice that the paper will not take off, I rub it with a wet cloth, but do not put on water enough to take off the blacking. I find that rubbing with paper is a much nicer way of keeping the outside of my teakettle, coffeepot and teapot bright and clean than the old way of washing them in suds. The inside of coffeepots and teapots should be rinsed in clear water, and never in dish-water.

Rubbing with dry paper is also the best way of polishing knives and tinware after scouring. This saves wetting the knife handles. If a little flour be held on the paper in rubbing tinware and spoons, they shine like new silver. For polishing windows, mirrors, lamp chimneys, etc., I always use paper in preference to any dry cloth. Preserves and pickles keep much better if brown paper instead of cloth is tied over the jar. Canned fruit is not so apt to mold if a piece of writing paper, cut to fit the can, is laid directly on the top of the fruit. Paper is much better to put under a carpet than straw. It is warmer, thinner, and makes less noise when one walks over it. A fair carpet can be made for a room not in constant use, by pasting several thicknesses of newspapers on the floor, over them a coat of wall-paper, and give it a coat of varnish. In cold weather I have often placed paper between my bed-quilts, knowing that two thicknesses of paper are as warm as a quilt. If it is necessary to step on a chair always lay a paper on it; this saves rubbing the varnish. Children easily learn the habit of doing so.

Waste-pipes—how to cleanse.—A simple, inexpensive method of cleaning the waste-pipe of washstands, bathtub, or kitchen, the stoppage of which often entails great expense, is said to be as follows: Just before retiring at night pour into the pipe enough liquid potash lye of thirty-six degrees strength to fill the "trap," as it is called, or bent portion of the pipe just below the outlet. About a pint will suffice for a washstand, or a quart for a bathtub or kitchen-sink. Be sure that no water runs into it till next morning. During the night the lye will convert all the offal in the pipe into soft soap, and the first current of water in the morning will remove it entirely,

and leave the pipe as clean as new The so-called potash lye is not recommended fo thi purpose The lye should be kept in heavy glas· bottle· or demijohn. covered with wicker-work and plainly labeled alway unde lock when not in actua' use.

Waste-paper Basket for the Kitchen.—Get the cheapest willow basket, either square or round tha i in the market, and instead of running ribbon between the reeds use strips of enameled cloth or common shelf oil-cloth. Have th strips double, with the cloth side in, and pink both edges; then cu a piece of oil-cloth to fit the bottom, and you have an attractive and durable basket.

Wasp Sting—cure for.—Apply an onion to the part affected, and the cure will be instantaneous.

Watch—how to regulate.—First, ascertain how many vibrations the watch beats in one minute, by counting every other vibration and comparing that time with a well-regulated watch or regulator. In general, Swiss watches beat 18,000 in one hour, viz., 300 in one minute; American watches, 16,200, or 270 per minute; and the English levers, 14,400, or 240 per minute. If there is any doubt, it is better to count up leaves and teeth, and ascertain the right number; but these cases are scarce where watches will beat odd numbers.

Having found out the right number, examine the balance carefully for one or two minutes, counting every vibration going from right to left, and in the meantime examine the regulator or clock, to see when one minute is up. If the watch is well regulated, the number of vibrations must be exactly half of the regular first number, viz., 150, 135, or 120, as only every other vibration has been recorded to facilitate the observation. If not so, move the regulator, right or left, until a perfect coincidence comes.

Watch Dials—to restore.—If the dial be painted, clean the figure off with spirits of wine, or anything else that will render the dial perfectly clean; then heat it to a bright red, and plunge it into a strong solution of cyanide of potassium; then wash in soap and water, and dry in box dust. Repeat if not a good color. India ink, ground with gum water, will do for the figures.

Watch Dials (Silver)—to whiten.—Flatten a piece of charcoal by rubbing it on a flat stone; on this place the dial face upward; apply a gentle heat carefully with the blow-pipe, allowing the flame to play all over the surface of the dial without touching it, so as to thoroughly heat without warping the dial. Then pickle and rinse, using acid enough to make the water very tart, and immersing but for a few seconds. Silver dials may also be annealed by heating them red hot on a flat piece of copper over a clear fire.

Water-cress (Stewed).—The following recipe may be new, and will be found an agreeable and wholesome dish: Lay the cress in strong salt and water, to clear it from insects. Pick and wash nicely, and stew it in water for about ten minutes drain and chop; season with pepper and salt; add a little butter, and return it to the stew-pan until well heated. Add a little vinegar first before serving; put

around it sippets of toast or fried bread. The above, made thin, as a substitute for parsley and butter, will be found an excellent covering for a boiled fowl. There should be more of the cress considerably than of the parsley, as the flavor is much milder.

Water—to clarify.—Add two ounces powdered alum and two ounces borax to a twenty-barrel cistern of rainwater that is blackened or oily, and in a few hours the sediment will settle, and the water be clarified and fit for washing.

Water—to filter quickly.—When it is desirable to filter water quickly, for immediate use, employ the following method: Put a quart of clean water over the fire and just bring it to a boil; remove it and strain it three or four times through flannel; cool it and keep it for use in a covered jar or pitcher.

Water (Mineral).—Epsom salts, one ounce; cream tartar, one-half ounce; tartaric acid, one-fourth ounce; loaf sugar, one pound; oil of birch, twenty drops; put one quart cold water on two tablespoonfuls yeast (wintergreen oil will do), let it work two hours and then bottle.

Water (Congress)—for fountains.—Common salt, seven and three-fourths ounces; hydrate of soda, twenty grains; bicarbonate of soda, twenty grains; calcined magnesia, one ounce. Add to ten gallons of water, and then charge with gas.

Water (Kissingen)—for fountains.—Bicarbonate of soda, one dram; carbonate of lime, two drams and two scruples; precipitate carbonate of lime, two scruples; common salt, eight ounces; muriate of ammonia, four grains; sulphate of soda, two drams and two scruples; sulphate of magnesia, two ounces; phosphate of soda, thirteen grains; phosphate of lime, two drams and two scruples. Mix; add water, three-fourths of a gallon. Let it stand for six hours; filter; add carbonate of magnesia, three drams and one scruple, and charge with ten gallons of water.

Water (Vichy)—for fountains.—Sulphate of potass, two drams; sulphate of soda, twenty-five grains; common salt, six drams; bicarbonate of ammonia, ten grains. Mix; add water, one gallon. Let it stand one day; filter, and then charge with ten gallons of water.

Waterproofing for Boots and Shoes.—Linseed oil, one pint; oil of turpentine, or camphine, a quarter of a pint; yellow wax, a quarter of a pound; Burgundy pitch, a quarter of a pound. To be melted together with a gentle heat, and when required for use, to be warmed and well rubbed into the leather before a fire, or in the hot sun. Should be poured, when melted, into small gallipots or tin boxes.

Water Ice (Strawberry).—Take two quarts of strawberries, the juice of a lemon, a pound of sugar, or one pint of strong syrup, half a pint of water. Mix, first rubbing the fruit through a sieve, and freeze.

Water Ice (Lemon).—Lemon juice and water, each half a pint; strong syrup, one pint; the rind of the lemons should be rasped off before squeezing with lump sugar, which is to be added to the juice;

mix the whole; strain after standing an hour, and freeze. Beat up with a little sugar the whites of two or three eggs, and as the ice is begining to set, work this in with the spatula, which will much improve the consistency and taste.

Water Ice (Orange).—May be made in the same way.

Water-lilies—to grow.—Water-lilies can be cultivated by sinking half a hogshead even with the ground, placing in the soil taken from the bottom of a pond, and planting a few roots therein. The hogshead is to be kept full of water, and the year following a crop of lilies surpassing those usually found in ponds in a wild state will be produced.

Water-ways—to purify.—1. A tablespoonful of pulverized alum sprinkled in a hogshead of water (the water stirred at the same time) will, after a few hours, by precipitating to the bottom the impure particles, so purify it that it will be found to possess nearly all the freshness and clearness of the finest spring water. A pailful, containing four gallons, may be purified by a single teaspoonful of the alum.

2. The most impure water may be made pure by filtering through charcoal. Take a large flower-pot, put a piece of sponge or clean moss over the hole in the bottom, fill three-quarters full of equal parts of clean sand and charcoal the size of a pea; over this lay a woolen cloth large enough to hang over the sides of the pot. Pour the water over the cloth and it will come out pure.

Water (Hard)—to soften.—Bean or oatmeal will soften hard water. The bran should be sewed in a muslin bag and kept in the water all night. The oatmeal should be treated as follows: Put two tablespoonfuls in a saucepan and pour a quantity of hot water upon and boil it a quarter of an hour; strain and mix with the water as needed.

Water—to test its purity.—To test the purity of water, put half a pint in a perfectly clean bottle; add a few grains of lump or loaf sugar; make tight—a glass-stopper preferred. Place the bottle in a warm, well-lighted room. If it remains clear after an exposure of eight to ten days, it is safe to use; but if it becomes turbid it is surely impure and unsafe to drink.

Water (Hard)—to test.—The proper test of hard water is soap. When soap comes in contact with the sulphate of lime, as in washing, it curdles, forming a new soap, which will not dissolve, and which often is seen floating on the surface in the shape of a greasy scum. The better plan of testing water for lime is to "dissolve a little soap in alcohol, and place a few drops of it in the water to be examined. If it remains clear, the water is perfectly soft; if it becomes turbid or opaque, the water is ranked as hard."

Waterproofing Cloth.—In a pail of soft water put half a pound of sugar of lead (the acetate of lead), and half a pound of alum; stir this at intervals until it becomes clear; then pour it off into another pail, and put the garment therein, and let it be in for twenty-four hours,

and then hang it up to dry without wringing it. Have worn garments thus treated in the wildest storm of wind and rain without getting wet. The rain hangs upon the cloth in globules; in short, they are really waterproof.

Waterproofing for Clothing.—Boiled oil, fifteen pounds; beeswax, one pound; ground litharge, thirteen pounds; mix and apply with a brush to the article, previously stretched against a wall or a table, well washing and drying each article before applying the composition.

Waterproofing (Invisible).—Imbue the cloth on the wrong side with a solution of isinglass, alum and soap dissolved in water, forming an emulsion of a milky thickness; apply with a brush, rubbing in well. When dry, it is brushed on the wrong side against the grain, and then gone over with a brush dipped in water; afterward brushed down smooth.

Waterproof for Porous Cloth.—Dissolve two and one-half pounds alum in four gallons water; dissolve also in a separate vessel the same weight acetate of lead in the same quantity of water. When both are well dissolved, mix the solutions together; and, when the sulphate of lead resulting from this mixture has been precipitated to the bottom of the vessel in the form of a powder, pour off the solution and plunge into it the fabric to be rendered waterproof. Wash and rub it well during a few minutes, and hang it in the air to dry.

Wax—to bleach.—First sheet it; keep it in the sunshine. To half a pound of good white wax add one-quarter ounce balsam of fir. You can guess the quantity; less will do; if you get in too much it will be sticky. Pour boiling water into the cup and let the wax melt gradually, then put in the balsam; have a dish of hot soap-suds; dip your mold in that, then into the wax quickly, then in cold water and slip it off.

Weakness in Children.—When a little one toddles weakly about, as if had to make an effort to place one foot before the other, bathe its back in weak alum water, and rub gently until there is a glow. Half a teaspoon of salt in three pints of water will do as a wash in summer if care is taken to keep from getting cold. A tea-cup of water, a small pinch of salt, and a tablespoonful of brandy is very strengthening to rub on.

Weeds—to kill.—If one will, when the dew is on, sprinkle a little fine salt on the leaves of any plant he wishes to kill, he will be both surprised and pleased at the result. Beginning some years ago with a few quarts annually, we now use some thousand pounds of salt each year in killing weeds, while no injury to the land or the crops is perceptible.

Weights—to raise.—An immense weight may be raised a short distance by tightening the rope between it and a support and then wetting the rope. The moisture imbibed into the rope by capilary attraction causes it to become shorter.

Weights and Measures—pounds per bushel.—Foreign salt,

coarse, eighty-five; unslaked lime, eighty; bituminous coal, seventy-six; corn in ear, seventy; foreign salt, ground, seventy; clover seed, sixty-two; foreign salt, fine, sixty-two; wheat, sixty; white beans, sixty; peas, sixty; onions, fifty-seven; Irish potatoes, fifty-six; shelled corn, fifty-six; rye, fifty-six; flaxseed, fifty-six; sweet potatoes, fifty-five; cornmeal, fifty; turnips, fifty-five; buckwheat, forty-eight; barley, forty-seven; castor beans, forty-six; timothy-seed, forty-five; blue grass seed, forty-four; hemp seed, forty-four; coke, forty; malt, forty-eight; dried peaches, thirty-three; oats, thirty; dried apples, twenty-four; ground peas, twenty-four; bran, twenty; plastering hair, eight.

Weight of Earth, Rock, etc.—A cubic yard of sand or ground weighs about thirty hundredweight; mud, twenty-five hundredweight; marl, twenty-six hundredweight; clay, thirty one hundredweight; chalk, thirty-six hundredweight; sandstone, thirty-nine hundredweight; shale, forty hundredweight; quarts, forty-one hundredweight; granite, forty-two hundredweight; trap, forty-two hundredweight; slate, forty-three hundredweight.

Weights which Answer to Certain Measures.—A tablespoonful is frequently mentioned in a recipe, in the prescriptions of medical men, and also in medical, chemical, and gastronomical works. By it is generally meant and understood a measure or bulk equal to that which would be produced by half an ounce of water.

A dessertspoonful is half of a tablespoonful; that is to say, by it is meant a measure or bulk equal to a quarter of an ounce of water.

A teaspoonful is equal in quantity to a dram of water.

A DROP.—This is the name of a vague kind of measure, and is so called on account of the liquid being dropped from the mouth of a bottle. Its quantity, however, will vary, either from the consistency of the liquid or the size and shape of the mouth of the bottle. The college of physicians determined the quantity of a drop to be one grain, sixty drops making one fluid dram. Their drop, or sixtieth part of a fluid dram, is called a mimim.

Graduated glass measures can be obtained at any chemist's, and they save much trouble. One of these, containing a wine pint, is divided into sixteen ounces, and the ounces into eight drams of liquid, by which any certain weight mentioned in a recipe can be accurately measured out. Home-made measures of this kind can readily be formed by weighing the water contained in any given measure, and marking on any tall glass the space it occupies. This mark can easily be made with a file. It will be interesting to many readers to know the basis on which the French found their system of weights and measures, for it certainly possesses the grandeur of simplicity. The meter, which is the basis of the whole system of French weights and measures, is the exact measurement of one forty-millionth part of a meridian of the earth.

Weight of Live Cattle—to determine.—Measure in inches the girth around the breast, just behind the shoulder-blade, and the

ength of the back from the tail to the fore part of the shoulder blade. Multiply the girth by the length, and divide by one hundred and forty-four. If the girth is less than three feet multiply the quotient by eleven. If between three and five feet multiply by sixteen. If between five and seven feet multiply by twenty-three. If between seven and nine feet multiply by thirty-one. If the animal is lean deduct one-twentieth from the result, or take the girth and length in feet, multiply the square of the girth by the length, and multiply the product by 3.36. The result will be the answer in pounds. The live weight multiplied by 6.05, gives a near approximation to the net weight.

Welding Cast Steel.—Borax, ten parts; sal-ammoniac, one part; grind or pound them roughly together; then fuse them in a metal pot over a clear fire, taking care to continue the heat until all spume has disappeared from the surface. When the liquid appears clear, the composition is ready to be poured out to cool and concrete; afterward, being ground to a fine powder, it is ready for use. To use this composition, the steel to be welded is raised to a heat which may be expressed by "bright yellow;" it is then dipped among the welding powder, and again placed in the fire until it attains the same degree of heat as before; it is then ready to be placed under the hammer.

Wells—to remove foul air from.—A correspondent gives an account of an extemporized apparatus for removing carbonic acid gas from wells. It was simply an opened-out umbrella let down and rapidly hauled up a number of times in succession. The effect was to remove the gas in a few minutes from a well so foul as to instantly extinguish a candle previous to the use of the umbrella. Whenever there is an escape of gas in an apartment, the adoption of this plan will be found useful.

Well Water—to purify.—Many people in the country who are compelled to drink well water are boiling all that is used in the family. The question is frequently asked how long it should be boiled. The best chemists say that half an hour's boiling is considered sufficient to destroy disease germs, if any exists in the water.

Well Water—to keep sweet.—The usual way to rid a well of worms and such-like obnoxious visitors has been to pump the water out; but a writer says that he purified his well water, which was subject to many worms, bugs and other insects as to render it almost unfit for drinking, by placing in the well a couple of good-sized trout. They have kept perfectly healthy, and have eaten up every living thing in the water. In the winter season crumbs of bread and crackers are thrown in. The water is perfectly pure and sweet.

Welsh rarebit (Welsh)—to make.—1. A Welsh rarebit is a pleasant variation for breakfast, and is made by melting a quarter of a pound of cheese, cut fine, in a pint of sweet cream or milk, and when the cheese and milk are boiling, stirring in quickly a well-beaten egg the moment before removing from the fire, spreading upon hot but-

tered toast, and serving immediately upon small hot plates, one to each person breakfasting at your table. The cheese will harden, and this dish be spoiled, if allowed to grow cold before eating it. Those who are fond of high seasoning, can mix a tablespoonful of liquefied mustard and cayenne pepper in melted butter, and pour into this dish while it is cooking.

2. One teacupful of chopped cheese, one teacupful of milk, one egg, butter size of a butternut; boil milk, butter, and cheese until smooth paste; add the egg well beaten and turn at once upon half slices of toast well buttered. Serve hot.

Wen—ways to remove.—1. Wens have been removed by painting them with collodion. The pressure that this exerts on the tumor lessens its blood supply, and gradually diminution takes place.

2. Take the yolks of eggs, beat up, and add as much fine salt as will dissolve, and apply a plaster to the wen every ten hours. It cures without pain or any inconvenience.

3. Dissolve copperas in water to make it very strong; now take a pin, needle, or sharp knife, and prick or cut the wen in about a dozen places, just sufficient to cause it to bleed; then wet it well with the copperas water, once daily.

Wheat Bran for Animals.—I have ever found wheat bran an unprofitable food for swine. They do not seem to possess the power of perfectly digesting it. In consequence of this, much of the bran passes through them undigested, or at least only partially assimilated. When mixed with Indian or other meal it digests better, but still not so well as to be washed. For growing cattle and dairy cows it is good feed, if mixed with cut hay well wetted. Then it takes a second mastication with the hay in a cud, and is thus fully prepared for complete digestion. Wheat bran is an excellent food for colts, mixed half and half with oats, or fed dry by itself during the winter, at the rate of two or three quarts morning and evening, according to the size of the animal. It may also be advantageously mixed with meal or oats for horses doing moderate work; but those who are kept at very hard or very fast work should be limited to a bran mash every Saturday night, if not to be taken out on Sunday. If they are, then give the mash some other evening, when they will have a rest the next day. Bran, mixed half and half with Indian or other meal, is good for hens, and also for growing chickens, after they are one or two months of age.

Whiskers—to promote the growth of.—The best method to force the growth of whiskers and mustaches is to shave the parts frequently. Use as a stimulant the ashes of burned tobacco, and bay-water.

White Woolens—to wash.—To wash white blankets, sheets, flannels, etc., have a tub of warm suds and also a tub of clear, warm water. Wash the articles quickly through the suds, using no soap if possible. Then put them through the tub of clear water and rinse in warm water without bluing.

White Lead—substitute for.—Sulphate of barytes ground in oil

and applied like paint. It can also be used to reduce white lead to any desired extent.

Whitewash—to 'clean from ceiling.—Take three pints of flour and beat thoroughly in cold water, then pour boiling water to it until cooked; dissolve one pound of alum in hot water, and pour in the paste. Use the paste quite thick. Apply to the ceiling with a whitewash brush, being sure to cover the ceiling thoroughly; then close the room, and let it stand over night. In the morning the bits of lime left clinging to the ceiling are easily scraped off. Be sure to carry everything from the room before commencing work, as the lime falls to the floor.

Whitewash—good and durable.—Take half a bushel of freshly-burned lime, slake it with boiling water; cover it during the process, to keep in the steam. Strain the liquid through a fine sieve, and add to it seven pounds of salt, previously well dissolved in warm water; three pounds of ground rice, boiled to a thin paste and stirred in boiling hot; one-half pound of powdered Spanish whiting; one pound of clean glue, which has been previously dissolved by soaking it well, and then hanging it over a slow fire in a small kettle with a large one filled with water. Add five gallons of hot water to the mixture, stir it well, and let it stand a few days covered from dirt. It must be put on quite hot. For this purpose it can be kept in a kettle on a portable furnace.

Whitewash (Brilliant).—Slake clean lumps of well burned white lime. To five gallons of the wash thus made add a quarter of a pound of whiting, or of burnt alum pulverized, half a pound of loaf-sugar, one quart and a half of rice flour made into a thin and well-boiled paste, and half a pound of white glue dissolved and boiled in water. Apply cold within doors, but warm outside. This will last many years.

Whitewash—to color.—To color whitewash a bright red, a dark red, a green, a sky-blue, or a drab, use the following: For reds, a fine red lake; green, a chrome green; blue; ultramarine, and drab, a lake of the desired tint.

Whitewash—to harden.—To one-half pail of common whitewash add one-half pint of flour. Pour on boiling water in quantity to thicken it. Then add six gallons of the lime water, and stir well.

Whitewash that will not Rub Off.—Mix up half a pailful of lime and water, ready to put on the wall; then take one-quarter pint of flour, mix it up with water; then pour on it boiling water, a sufficient quantity to thicken it; then pour it while hot into the whitewash, stir all well together, and it is ready for use. Alum is one of the best additions to make whitewash of lime that will not rub off. When powdered chalk is used, glue water is also good, but would not answer for outside work exposed to much rain.

Whitewash—for outside use.—The best method of making a whitewash for outside exposure is to slake half a bushel of lime in a barrel, add one pound of common salt, half a pound of the sulphate

of zinc, and a gallon of sweet milk. Any desired color may be imparted to whitewash by adding coloring matter to suit.

Whitewash—ways to make.—1. The recipe for whitewashing sent out by the Lighthouse Board of the Treasury Department has been found by experience to answer on wood, brick and stone nearly as well as oil-paint, and is much cheaper. Slake half a bushel of unslaked lime with boiling water, keeping it covered during the process. Strain it, and add a peck of salt, dissolve in warm water; three pounds of ground rice put in boiling water and boiled to a thin paste; one-half pound of powdered Spanish whiting, and a pound of clear glue, dissolved in warm water. Mix these well together, and let the mixture stand for several days. Keep the wash thus prepared in a kettle or portable furnace, and when used put it on as hot as possible with either painters' or whitewash brushes.

2. Take sixteen pounds of the best Paris white, half a pound of white transparent glue; prepare as follows: The glue is covered at night with cold water, and in the morning is carefully heated, without scorching, until dissolved. The Paris white is stirred in with hot water, to give the proper consistency of applying to walls. Except on very dark and smoky walls a single coat is sufficient.

Whitening the Hands.—Dilute glycerine with lemon juice for whitening the hands; alone it is sticky and unpleasant.

White Worms—to destroy.—The white worms which infest, occasionally, all soils where plants are kept in pots, may be removed as follows: Sprinkle lime-water over the soil, or sprinkle a little slaked lime on the earth and in the saucer of the pot. Lime water may be easily made by slaking a large piece of lime in a pail of cold water, letting this settle, and then bottling the clear water for use. Give each pot a tablespoonful twice a week.

Whooping Cough—treatment of.—Dr. Grath, of Vienna, proposes a singular treatment for this distressing ailment, which will doubtless receive careful consideration from the medical profession. He states that by placing twenty drops of the oil of turpentine on a handkerchief, holding it before the face, and taking about forty deep inspirations, to be repeated thrice daily, marked relief, succeeded in cases of laryngeal catarrah by a speedy cure, will be the result. Being called in to attend an infant of fifteen months in the convulsive stage, he instructed the child's mother to hold a cloth, moistened as already described, before it when awake, and to drop the oil upon its pillow when asleep. In this instance the remedy in its effect was most beneficial. The frequency and severity of the attacks sensibly decreased in the course of twenty-four hours, and by proper support by the help of stimulants, improvement was rapid.

Whooping Cough—remedies.—1. To empty the child's stomach by a lobelia emetic, is the first step. After this make a syrup of sugar, ginger-root, a little water, and enough lobelia tincture to produce a slight nausea. This, given two or three times a day, will loosen the cough very much.

2. The inhalation of air charged with ammonia vapors, as a remedy for whooping cough, has been tried in France with success. One of the methods of application employed is boiling ammonia in the room where the patient is.

Window-blinds—to clean.—Strong soap will destroy green paint more readily than other colors, having the same effect that it has with grease. Many rooms are soiled by the ignorance or carelessness of wash women, in the application of strong soap water. Much better use whiting on the soiled places and weak solution of soap in cleansing, by which the luster will be preserved.

Wine (Blackberry).—Blackberry and strawberry wines are made by taking the above wine when made with port wine, and for every ten gallons from four to six quarts of the fresh fruit, bruised and strained, are added, and let stand four days till the flavor is extracted; when bottling, add three or four broken raisins to each bottle.

Wine (Currant).—To every gallon of expressed juice, add two gallons soft water, six pounds brown sugar, cream tartar, one and one-half ounce, and one quart brandy to every six gallons; some prefer it without brandy. After fermentation, take four ounces isinglass dissolved in one pint of the wine, and put to each barrel, which will fine and clear it, when it must be drawn into clean casks, or bottled, which is preferable.

Wine (Rhubarb).—To each gallon of juice, add one gallon of soft water, in which seven pounds brown sugar have been dissolved; fill a keg or barrel with this proportion, leaving the bung out, and keep it filled with sweetened water as it works off, until clear. Any other vegetable extract may be used if this is not liked; then bung down or bottle as you please. The stalks will yield three-fourths their weight in juice; fine and settle with isinglass as above. This wine will not lead to intemperance.

Wine (Ginger).—1. Water ten gallons, lump sugar twenty pounds, bruised ginger eight ounces, three or four eggs. Boil well and skim, then pour hot on six or seven lemons cut in slices, macerate for two hours, then rack and ferment; next add spirit two quarts, and afterward finings, one pint; rummage well.

2. To one quart ninty-five per cent. alcohol, add one ounce best ginger-root (bruised not ground), five grains capsicum and one dram tartaric acid. Let it stand one week and filter; now add one gallon water in which one pound of crushed sugar has been boiled. Mix when cold. To make the color, boil one-half ounce cochineal, three-fourth ounce cream tartar, one-half ounce, saleratus, and one-half ounce alum, in one pint of water till you get a bright-red color.

Wine (Morella).—To each quart of the expressed juice of the morella, or tame cherries, add three quarts water and four pounds of coarse brown sugar; let them ferment, and skim till worked clear; then draw off, avoiding the sediment at the bottom. Bung up or

bottle, which is best for all wines, letting the bottles lie always on the side, either for wines or beers.

Wine (Port).—Worked cider, forty-two gallons; good port wine, twelve gallons; good brandy, three gallons; pure spirits, six gallons; mix. Elderberries and aloes, and the fruit of the black haws, make a fine purple color for wines, or use burned sugar.

Wine (Raisin)—equal to sherry.—Boil the proper quantity of water and let it stand till cold. To each gallon of this add four pounds of chopped raisins, previously well washed, and freed from stalks; let the whole stand for one month, stirring frquently; then remove the raisins and bung up closely for one month more; then rack into another vessel, leaving all sediment behind, and repeat till it becomes fine; then to every ten gallons add six pounds of fine sugar and one dozen of good oranges, the rind being pared very thin, and infused in two quarts of brandy, which should be added to the liquor at its last racking. Let the whole stand three months in the cask, then bottle. It should remain bottled twelve months. To give it the flavor of Madeira, when it is in the cask, put in a couple of green citrons, and let them remain till the wine is bottled.

Wine made from the Wild Grape.—Many a housekeeper feels the inconvenience of a protracted absence from home in summer, when she views her shortened allowance of stores in the way of preserves, pickles and home-made wines. Yet even late in the fall she may find room for activity. The small, wild grape, known to boys as the "bird grape," never attains its full sweetness until after the fall of frost, and makes an excellent wine for culinary purposes. Mash the grapes in a large bowl or tub with a mallet, and keep them in a warm place until there is some sign of fermentation setting in. Then strain the juice by dripping through a flannel bag or strong yet slightly porous cotton cloth. To three quarts of juice add one quart of water and three pounds of light brown sugar. If you put it away in a demijohn, select a warm, dry closet, and tie up the mouth closely with a piece of thin muslin: Do not cork up tight until the whole process is complete. It will be all the better if fermentation ensues speedily, but if the place of deposit is not warm enough, never mind; as soon as the first warm days of spring come it will go on to ferment as though there had been no interruption to the process, and be none the worse for the delay. After all, it will make wine much sooner than if you waited even for blackberry season.

Wine (Flat)—to restore.—Add four or five gallons of sugar, honey or bruised raisins to every one hundred gallons, and bung close; a little spirits may be added, to roughen; take bruised aloes or powdered catechu, and add to the wine in suitable proportions, or add a small quantity of bruised berries of the mountain ash, to allay inordinate flatness. Let it stand two hours and bottle, using yeast, of course, as before.

Willow Furniture—to clean.—To clean willow furniture use salt and water, and apply with a coarse brush, and dry thoroughly.

Windgalls or Puffs.—Windgalls are puffy swellings occurring along the tendons of the legs of horses, below the knee. They are the results of sprains or strains of the tendons, and are generally filled with synovial fluid, or lymph, or serum. A padded bandage, with astringent lotions applied two hours a day at first, adding two hours every day after until it is kept on continually is the usual remedy. Rest from work is helpful to cure.

Wings of Birds—to preserve.—Place them as you wish and dry them slowly before the fire. We cure turkeys' wings by spreading them on the hearth and placing a smoothing-iron on them to hold them in place until the moisture and oil be dried out; sometimes it takes several days.

Window Gardening Hints.—A very common error in window gardening is that of attempting too much. Too many plants are crowded into the little space at command, so that it is impossible to give each the air and light it should have. Again, plants of too diverse characters are brought together. It is no uncommon thing to see tropical plants and plants from the temperate zone, if not even Alpine plants, all crowded into the same window and subject to the same temperature and treatment. Better far to have one healthy, well-grown plant that will yield its flower in perfection, than a dozen sickly, feeble, wretched plants that have no beauty either of leaf or blossom.

Window Gardens.—Economical devices in the way of window gardening are often very effective. I once saw a window arranged very prettily with a common soap-box and a few plants. The box was fastened by two sticks, reaching from the floor to the box. In the box, which was about two-thirds full of earth, were planted geraniums, heliotrope, and the white begonia, sometimes called wax plant. The geraniums, which were of the scarlet variety, were placed in the center of the box, with the begonias around them; then came the heliotrope, in full bloom, and sending the fragrance of its flowers all over the room. Around the front of the box moneywort and variegated air-plants were growing almost to the floor, and completely hiding the box. A bay-window may be decorated in a cheap manner by standing two terra cotta drain pipes on opposite sides of the window, and against the wall. A small square of oil-cloth will prevent their soiling the carpet. Now, in the one on the sunniest side, put a pot containing a barclyana and a scarlet geranium; on the other side put a pot of German ivy with a plant of lantana. Over the top of your pots plant Kenilworth ivy seed. Train your vines on wires or strings so as to form an arch, and you will soon have as pretty an ornament to your room as you would wish for. If you have a flat window, where there is very little sun, you may make it beautiful by arranging a box in the manner above described, and filling it with fuchsias. They should be kept warm and moist. Ferns make a beautiful ornament to a room, and can be kept in the shade. A fern basket must always be moist.

Windows—to imitate ground glass.—Windows are crystalized, or made to imitate ground glass, by dissolving epsom salts in hot beer or a weak solution of gum arabic. You can make any pattern or border you please by cutting out a design on a sheet of pasteboard and rubbing the design with a damp cloth.

Window-glass—to incrust with jewels.—Dissolve dextrine in a concentrated solution of sulphate of magnesia, sulphate of zinc, sulphate of copper or other metallic salts; strain the liquid and brush a thin coat of it over the glass and dry slowly at the ordinary temperature, keeping the glass level. For protection it may be varnished. The effect produced is that of an incrustation of diamonds, sapphires, etc., according to the color of the salt used.

Window-plants—cultivation of.—Those who keep plants during the winter will find their success to depend upon supplying them with the needed water, heat, and air, and in preserving them from insects and dust. These matters are easily regulated in a greenhouse, but it is more difficult with plants in window culture.

Watering requires judgment. To saturate the earth in a pot by a daily soaking is a slow but sure way of killing a plant. The roots need air, which they cannot get if they are surrounded by mud. It is better to allow the plant to flag a little than to over-water it. Carefully watch the plants and only give water when they show that they need it.

Hanging baskets are best watered by plunging them in a pail or tub of water until the ball of earth is well soaked. Allow the excess to drip, and when this ceases, return the basket to its place.

HEAT FOR HOUSE-PLANTS.—Living-rooms are often kept too hot for plants, as well as for the inmates. The nearer the temperature can be kept at seventy degrees, with a fall of ten or fifteen degrees during the night, the better for both.

Cold nights in some localities may injure plants at the windows. Remove them, when severe cold is expected, to the middle of the room, and if necessary cover them with a sheet or with newspapers.

Give fresh air whenever the outside temperature will allow, if for only a few minutes at a time, avoiding a cold draft directly upon the plants.

Dust is a great obstacle to successful window gardening. Ivies and all other smooth-leaved plants may be kept clean by washing the leaves with a sponge or soft cloth. Plants with downy leaves should be set in a bathtub or sink, and freely showered by water from a pot with a fine rose, held high above them. When the room is swept, the plants should be covered with a thin cloth, or with newspapers, kept from resting on them; these are to remain over them until the dust settles.

INSECTS.—Those who carefully watch their plants can observe the first appearance of insects, and will rarely need anything more than the thumb and finger, or a brush, to remove the pests. Where plant lice are numerous, showering with tobacco water and afterward with

clear water will kill them. Scale insects and mealy bugs are easily removed by hand, using a small pointed stick.

Chrysanthemums that have bloomed in pots should have the stems cut off as soon as they are out of the flower, and the pots containing the roots removed to the cellar, where they should be looked to and not ever allowed to get so dry as to kill the roots.

Windows—to clean.—Chamois, or buckskin, cleans a window very nicely; but if the wings of turkeys, geese or large fowls are saved and well dried there is nothing better—far more economical than chamois, beside removing all the dirt more effectually. With the wings all the dirt can be taken out of corners, and when done there will be no lint on the glass.

Nothing is better for cleaning stoves, brushing out corners or brushing off furniture than a good, clean wing.

Wire—to color.—To color bright wire black or blue and perfectly smooth, the same as hair-pins, take of asphaltum, three ounces; boiled oil, four quarts; burned umber, eight ounces; mix by heat, and thin with turpentine (oil) before the mixture becomes cool. Dip the wire in this (not too thick) and harden in a japanner's oven at as high a heat as it will bear without blistering.

Wood Ashes—for fertilizing.—The best results from wood ashes are secured by adding a small proportion of common salt. Ashes contain all the mineral elements of the plant, and they exert a good influence in unlocking fertility that would not be otherwise available. In burning anything the chlorine it contains is carried off with the smoke, and salt, chloride of sodium, supplies the deficiency.

Wood—to ebonize.—Mix up a strong stain of copperas and logwood, to which add powdered nutgall. Stain your wood with this solution; dry; rub down well; oil; then use French polish made tolerably dark with indigo or finely powdered stone blue.

Wood—to make indestructible.—To make wood indestructible from rot or fire immerse it in a saturated solution of borax heated to the boiling point. Let the wood remain in the solution twelve hours; take out; dry; immerse again in a weaker solution three hours and dry.

Woodwork—to render inflammable.—Woodwork strongly impregnated with tungstate of soda or silicate of soda—by treatment in strong aqueous solution of these salts—will be found to be quite uninflammable.

Wood—to render indestructible.—Robbins' process: The apparaatus used consists of a retort or still, which can be made of any size or form, in which resin, coal tar, or other oleaginous substances, together with water, are placed in order to subject them to the heat. Fire being applied beneath the retort containing the coal tar, etc., oleaginous vapor commences to rise, and passes out through a connecting pipe into a large iron tank or chamber (which can also be built of any size), containing the timber, etc., to be operated upon. The heat acts at once upon the wood, causing the sap to flow from

every pore, which, rising in the form of steam, condenses on the body of the chamber, and discharges through an escape pipe in the lower part. In this process a temperature of two hundred and twelve to two hundred and fifty degrees Fahrenheit is sufficient to remove the surface moisture from the wood; but after this the temperature should be raised to three hundred degrees or more, in order to completely saturate and permeate the body of the wood with the antiseptic vapors and heavier products of the distillation. The hot vapor coagulates the albumen of the wood, and opens the pores, so that a large portion of the oily product or creosote is admitted; the contraction resulting from the cooling process hermetically seals them, and decay seems to be almost impossible. There is a man-hole in the retort, used to change or clean out the contents; and the wood chamber is furnished with doors made perfectly tight. The whole operation is completed in less than one hour, rendering the wood proof against rot, parasites, and the attacks of the *teredo navilis* or naval worm. German stone coating for wood: Chalk, forty parts; resin, fifty parts; linseed oil, four parts; melt together. To this add one part of oxide of copper, afterward one part sulphuric acid; add this last carefully; apply with a brush.

Wood (Light)—to color.—Light woods may be dyed by immersion. A fine crimson is made as follows: Take one pound of ground brazil, boil in three quarts of water; add one-half ounce of cochineal, and boil another half hour; may be improved by washing the wood previously with one-half ounce saffron to one quart of water; the wood should be pear-wood or sycamore. Purple stain: One pound logwood chips, soak in three parts of water, boil well an hour; add four ounces pearl-ash, two ounces powdered indigo. Black may be produced by copperas and nut-galls, or by japanning with two coats of black japan, after which varnish or polish, or use size and lampblack previous to laying on japan. A blue stain: One pound of oil of vitriol put in a glass bottle with four ounces of indigo; lay on the same as black. A fine green: Three pints of the strongest vinegar, four ounces best powdered verdigris (poison), one-half ounce sap-green, one-half ounce indigo. A bright yellow may be stained with aloes; the whole may be varnished or polished.

Wood—various statistics about.—A cord of wood is one hundred and twenty-eight cubic feet as it lies piled up. The dimensions of a cord are usually four feet high, four feet wide, and eight feet long, which makes one hundred and twenty-eight feet. Four feet high, three feet wide, and ten and two-third feet long make a cord, equal to one hundred and twenty-eight feet. But allowing for the interstices in fairly piled wood, we may reckon a cord to actually contain about seventy-two cubic feet of solid wood. Thoroughly dry wood weighs about as follows:

Pounds	*One cubic ft.*	*One cord.*
Hickory	62 lbs	4,464
White Oak	53	3,816

Pounds.	*One cubid ft.*	*One cord.*
White Ash	49	3,528
Red Oak	45½	3,276
White Beach	44	3,240
Apple Tree	43	3,096
Black Birch	43	3,096
Black Walnut	42½	3,060
Hard Maple	40	2,880
Soft Maple	37	2,664
Wild Cherry	37	2,664
White Elm	36½	2,628
Butternut	35½	2,556
Red Cedar	35	2,520
Yellow Pine	34	2,448
White Birch	33	2,376
Chestnut	32	2,304
White Pine	26	1,876

The average amount of dry charcoal obtained from a cord, by careful experiments, ranged as follows:

	Pounds.
Hickory	1,172
White Ash	888
White Oak	826
Apple Tree	779
Black Walnut	687
White Elm	644
White Beach	635
Red Oak	630
Red Cedar	624
Hard Maple	617
Black Birch	604
Chestnut	590
Yellow Pine	585
Wild Cherry	579
Soft Maple	551
Butternut	527
White Pine	455
White Birch	450

Numerous tests have been made with different kinds of wood to ascertain how long one pound of each would, in combustion, maintain ten degrees of heat in the same room. These ranged from six hours for butternut, soft maple, and white and black birch, up to six hours and forty minutes for hickory, ash, and apple. The variation is less than would be expected, but in this case, each kind of wood is taken thoroughly dry, so that the experiments are essentially the result of burning an equal amount of charcoal from different woods.

Relative value of a cord of various seasoned woods, taking into ac-

count weight, heating power, etc., and calling hickory wood worth five dollars a cord: Hickory, $5; white oak, $4.05; white ash, $3.85; apple, $3.50; red oak, $3.45; white beach, $3.25; black walnut, $3.25; black birch, $3.15; hard maple, $3; white elm, $2.90; red cedar, $2.80; wild cherry, $2.75; soft maple, $2.70; yellow pine, $2.70; chestnut, $2.60; butternut, $2.55; white birch, $2.40; white pine, $2.10.

Wood—to stain.—First, wash the wood with a solution of sulphuric acid and water, made in the proportion of one ounce to a pint of warm water. Mix when wanted; put on warm and wash evenly over every part. Second, stain the wood thus prepared with tobacco stain, using a piece of flannel or sponge, rubbing it in lightly. To make the stain, take six pounds common shag tobacco, cover with water and boil, letting it simmer slowly away till of the consistence of syrup. Strain for use. Third, when entirely dry, brush it over with the following mixture: One-half pound bees-wax, one-half pint linseed oil, one pint boiled linseed oil. This may be omitted and the wood simply varnished and polished instead. When it is desired to give the tone of light oak or maple, the solution of sulphuric acid should be much weaker, and only a light coat of the stain used. When a dark tone is preferred, two coats of the stain should be put on.

Wood—to petrify.—Gum salt, rock alum, white vinegar, chalk and pebbles powder, of each an equal quantity. Mix well together. If, after the ebulition is over, you throw into this liquid any wood or porous substance, it will petrify it.

Wood and Brickwork—to protect from damp weather.—Take three pecks of lime, slaked in the air, two pecks of wood-ashes and one peck of white sand. Sift them fine, and add linseed oil sufficient to use with a paint bush; thin the first; use it as thick as it will work for the second coat, grind it fine, or beat it in a trough, and it is a good composition.

Woodwork—to cleanse.—Save the tea-leaves for a few days, then steep them in a tin pail or pan for half an hour, strain through a sieve and use the tea to wash all varnished paint. It requires very little "elbow polish," as the tea acts as a strong detergent, cleansing the paint from all impurities and making the varnish equal to new. It cleans window sashes and oil-cloths; indeed, any varnished surface is improved by its application. It washes window panes and mirrors much better than water, and is excellent for cleaning black walnut picture and looking-glass frames. It will not do to wash unvarnished paint with it. Whiting is unequaled for cleaning white paint. Take a small quantity on a damp flannel, rub lightly over the surface, and you will be surprised at its effects.

Woodwork around Doors—to cleanse.—Take a pail of hot water; throw in two tablespoonfuls of pulverized borax; use a good coarse house-cloth—an old coarse towel does splendidly—and wash the painting; do not use a brush; when washing places that are extra yellow or stained, soap the cloth; then sprinkle it with dry powdered borax

and rub the places well, using plenty of rinsing water; by washing the woodwork in this way you will not remove the paint, and the borax will soften and make the hands white—a fact well worth knowing.

Wool—to dye black.—According to the following recipe the dye does not rub off, fibers remain loose and the wool has a desirable reddish cast: Boil the thoroughly washed wool well for an hour and a half in a bath composed, for one hundred pounds of wool, of two and one-half pounds of chromate of potash, two and one-half pounds of alum, one-half pound of blue vitriol, and two pounds of commercial sulphuric acid, and dye it, without rinsing, in fresh water, with twenty pounds of logwood and twenty pounds of Brazil wood. It is advantageous for the color to allow the wood to remain in the mordant for twelve hours.

Wool of Sheep—to improve by smearing.—Immediately after the sheep are shorn, soak the roots of the wool that remain all over with oil, or butter, and brimstone; and, three or four days afterward, wash them with salt and water. The wool of next season will not be much finer, but the quantity will be in greater abundance. It may be depended upon, that the sheep will not be troubled with the scab or vermin that year. Salt water is a safe and effectual remedy against maggots.

Woolen Goods—to wash.—To wash woolen goods nicely, to each pail of water used add one tablespoonful of ammonia and one of beef-gall; wash out quickly and rinse thoroughly in warm water with a very little beef-gall added.

Woolen Shawls—to wash.—The following is the Scotch method of washing woolen shawls: Scrape one pound of soap, and boil it down in water. When cooling beat it with the hand; it will become a sort of jelly. Add three tablespoonfuls of spirits of turpentine and one of spirits of hartshorn; wash the article thoroughly in it, then rinse in cold water until all the soap is taken off, then in salt and water; fold between two sheets, taking care not to allow two folds of the article washed to lie together; mangle and iron with a very cool iron. Shawls done in this way look like new. Use the salt only where there are delicate colors that may strike.

Work-baskets—pretty and cheap.—1. Take coarse tidy cotton No. 8, and crochet a round mat, thick, that is, not to put over the thread; have the mat the size of a two quart dish, or if you wish for a small basket, take a pint dish, which is a pretty size; then crochet six times round without widening; then crochet round three times the shell pattern, with which every one is familiar; one ball of cotton will make one basket over the pint dish, one over a two-quart dish; then make a handle of two shell rows long enough to go over it to look as you please; then make a stiff starch of flour, put in a lot of glue, say half a pound to a pint and a half of starch; put in the crochet basket while boiling hot; have it thoroughly wet; take and wring out a little; stretch it over the dish intended, and let them dry; the quicker

the better; serve the handle in the same way. When dry, take a paint brush and varnish over with brown shellac, which you will find at any paint-shop. Let it dry; when thoroughly dry they will be stiff like a board; then take and line them, and thread in bright colored ribbon in through the meshes of the shell-work, tying a bow now and then on the basket, and you will have a pretty basket at a trifling expense. Fasten the handle to the basket with a bow of ribbon.

2. Take two peach baskets and fasten the bottoms firmly together with small nails. Line one of the baskets with dark colored chintz; take a piece of the cloth two inches longer than the depth of the basket and wide enough to go once and a half around; gather this evenly on a circular piece of chintz just large enough to lie in the bottom of the basket. Fit this in smoothly. Then draw the upper end over the edge of the basket, and fasten with carpet tacks. Next take off the chintz a piece a trifle longer than the united length of both baskets, and wide enough to go around smoothly. Hem one end, and make all around a row of pockets five inches deep, gathered quite full, and furnished with a heavy rubber cord at the top. Fasten this neatly on the outside of the lined basket; draw the other end inside the empty one, and fasten with tacks. Finish with a band of gay ribbon tied around the center to give it the shape of an hour-glass, and little knots of blue ribbon between the pockets.

3. The basket is of fine wicker-work, the sides are lined with gathered satin, and the bottom with embroidered plush; both are finished with silk cord. The outside is ornamented with fringe of crewels of various colors. Handles of cord.

Worms—treatment of.—Some members of the profession still cling with bull-dog tenacity to the opinion that worms do not affect the health of children, and that they are natural to them. The latter may or may not be true, but when they accumulate in the intestines, they produce the same disturbance that any foreign, indigestible substance would do. We find the picking of the nose, swollen lower eye-lids, restlessness in sleep, groaning, gritting teeth, starting, and lastly, spasms.

Worms kill more children than teething; and when you find the above symptoms with a strawberry tongue and a fever, which will attack several times daily, going off as frequently in cold sweats, you can swear that you have a case of worms, and had as well prepare and attack them.

Now as to the best means of getting rid of them. I use the fluid extract of senna and spigelia in teaspoonful doses for patients of eight or ten years of age, and less in proportion, night and morning, for three nights and days, following this up each morning with a good dose of castor oil, provided the senna and spigelia does not act. Then wait three days, and again institute the same proceedings, and for the same length of time.

This treatment is for the lumbric oid. For the oxyuris, or "thread

worm," I use any bitter infusion by enema, sulph. quinine, followed by an enema of common salt and milk—warm water half an hour afterward, which will destroy and expel them.

The symptoms of the presence of the worm are the same as the former, with the exception that in the latter you will find the sufferer scratching the anus. If every practitioner will use these he will be gratified by the restoration to immediate health of many a little sufferer, who would otherwise linger in sickness for many months and perhaps eventually die.

Wormwood—its medical uses.—Wormwood is a tonic and anthelmintic. It is used externally as a discutient and antiseptic. It is used internally in long-standing cases of dyspepsia, in the form of infusion, with or without aromatics. It has also been used in intermittents.

Dose: Of the infusion, from one to two ounces, three times a day; of the powder, from one to two scruples.

Worms in Horses—to cure.—A remedy for worms in a horse which has never failed of a cure is to take half a cup of pure, hard wood ashes, finely sifted and mixed dry with the mash or food. If one dose should not prove sufficient, repeat it after a day or two.

Worm Lozenges.—Powdered lump sugar, ten ounces; starch, five ounces; mix with mucilage; and to every ounce add twelve grains of calomel; divide into twenty grain lozenges. Dose, two to six.

Worm Medicines.—1. Two tablespoonfuls of pumpkin seeds peeled and pulverized, or given to a child who will chew fine. The seed does not kill, but stupefies the worm. The next day give castor oil or any other cathartic, and if worms are present in the system they will pass off.

2. Make an infusion in the proportion of one pint of boiling water to one ounce of dried hyssop flowers; let it stand ten minutes; pour it off into a wine bottle, and take a wine-glass, or rather less, according to age, two or three times a day.

Worth Knowing.—Ripe tomatoes will remove ink or other stains from the hands. Kerosene will soften leather hardened by water, and render it as pliable as new. To heal cut fingers with rapidity, grasp them in a cloth saturated with alum water; they will sting sharply for a little while, but the pain will subside quickly and for good. The same remedy will cure chafing, but it is too severe to be used upon children. To keep tinware nice and bright, scour it every two or three weeks with finely sifted coal ashes. To clean willow furniture use salt and water, and apply with a horse brush, and dry thoroughly. Machine grease may be removed from wrap goods by dipping the fabric in cold rain water and soda.

Wounds and Cuts—treatment of.—Farmers who live far from surgical aid, and those who go off on hunting and other excursions, are often at a loss what to do when an accident occurs. In many families some kind of liniment or application is kept which is regard-

ed as an universal remedy, but it is often the worst thing that can be applied. In all cases of wounds, recollect that nature makes an immediate attempt to repair damages, and the best thing we can do is to give her a chance and aid her.

In the majority of wounds, where no important artery or vein is cut, all we have to do is to bring the edges of the wound together and hold them there, and if the wound is not a ragged one, healing will commence at once. Should, however, the edges of the wound be much torn, then use cold water dressings, until surgical aid can be had; these may be lint, or any soft cloths, wet in the coldest obtainable water and kept wet over the wound. Should an artery be wounded, the fact will be known by the blood coming out in jerks or spurts, and one must make use of such anatomical knowledge as he may have. Keep cool. If the wound is on a limb, applying a compress somewhere between the wound and the body will stop the bleeding. Tie a handkerchief around the limb, and use a stick to twist it in such a manner as to bring a pressure on the artery. A wounded vein is much less difficult to manage. A bit of lint bound firmly over the wound will usually stop the bleeding. In all such cases, an abundant use of the coldest water is advisable. Perfect quiet is essential; make the wounded person keep absolutely at rest, and having dispatched a messenger for the nearest surgeon, apply cold water dressing, avoiding the use of all "balsams," "pain-killers," "reliefs," and the like, which are of a highly inflammatory nature, though wounds sometimes get well in spite of them.

Wounds—a new cure for.—A writer on health topics gives the following directions for curing wounds: As soon as a wound is inflicted, get a little stick—a knife or file handle will do—and commence to tap gently on the wound. Do not stop for the hurt, but continue till it bleeds freely and becomes perfectly numb. When this point is reached you are perfectly safe—all that is necessary is to protect it from dirt. Do not stop short of bleeding and numbness, and do not on any account close the opening with plaster. Nothing more than a little cerate on a clean cloth is necessary. We have used and seen this used on all kinds of simple punctures for years, and never knew a single instance of a wound becoming inflamed or sore after this treatment. Among other cases a coal-rake tooth going entirely through the foot, a rusty darning needle through the foot, several instances of file shanks through the hand, and numberless cases of rusty nails, awls, etc., but we never knew a failure of this treatment.

Wounds (Bleeding of)—to stop.—The following simple remedies may be made use of: Soak some linen rag in strong vinegar; burn it and strew the ashes on the wound, or bruise the tops of stinging nettles and place them over it, or apply a good dressing of the powder of ripe puff-balls. In certain cases it may be desirable to tie two or three tight ligatures near the lower part of each joint, and slacken them gradually. This will assist in stopping the flow of blood.

Wounds—treatment of.—A wound produced by a sharp cutting instrument will heal without trouble when the edges are nicely brought together, and left so, without putting on any salve, provided the access of air is shut off and the person posseses a good constitution. If the wound is produced by a rusty nail, or a similar cause so as to be jagged, it will soon become very inflamed, and in such a case it is recommended to smoke such a wound with burning wool or woolen cloth. Twenty minutes in the smoke of wool will take the pain out of the worst wound, and if repeated once or twice will allay the worst case of inflammation arising from a wound.

For painful wounds take a shovel of burning coals and sprinkle with brown sugar; hold the wonnded parts in the smoke for fifteen minutes.

Writing for the Press.—It would be a great favor to editors and printers should those who write for the press observe the following rules: First.—Write with black ink, on white paper, wide ruled. Second.—Make the page small, one-fourth that of a foolscap sheet. Third.—Leave the second page of each leaf blank. Fourth.—Give to the written page an ample margin all round. Fifth.—Number the papers in the order of their succession. Sixth.—Write in a plain, bold hand, with less respect to beauty. Seventh.—Use no abbreviations which are not to appear in print. Eighth.—Punctuate the manuscript as it should be printed. Ninth.—For italics underscore one line; for small capitals, two; capitals, three. Tenth.—Never interline without the caret to show its place. Eleventh.—Take special pains with every letter in proper names. Twelfth.—Review every work to be sure that none is illegible. Thirteenth.—Put directions to the printer at the head of the first page. Fourteenth.—Never write a private letter to the editor on the printer's copy, but always on a separate sheet.

Writing (Faded)—to restore.—Sometimes a physician's prescription may become faded by water and other fluids, and it may be a matter of life and death to have it renewed, or made legible. You can restore faded writing by damping a piece of soft white paper; lay it on the faded writing, press it down closely; put a tablespoon of spirits of hartshorn in a tin vessel with a candle or lamp under it. Hold the soft damp paper over it, so as to receive the fumes of the hartshorn; if the writing is not exhibited on the soft paper plain enough, dampen it again and repeat the whole process until it is plain enough.

Yeast—to make.—Pare, boil, and mash fine, nine medium-sized potatoes; put a large cupful of light hops into a quart of cold water and boil; strain on the potato and add another quart to the hops to strain; also put in a cupful of sugar, four large tablespoonfuls of salt and a little ginger; when lukewarm, add two yeast cakes, or other sweet yeasts; raise in a warm place till light, then put in a cool dry place; this does not sour, nor does the bread made from it require much if any salt.

Yeast Cakes—to make.—Boil together half a dozen potatoes and a handful of hops tied in a cloth. When the potatoes are done remove from the fire, mash them fine, put them in a hot liquor, set over the fire, and thicken them with three or four tablespoonfuls of flour. Let them cool till lukewarm, then add a cupful of good yeast and set in a warm place. When light, stir in corn meal, till a thick dough is formed. Place this in a lump on the kneading-board and slice off cakes with a knife, dry in the shade; turning often while drying. Pack away in a close vessel where the air will not reach them.

Yeast Mixture.—Some housekeepers find yeast cakes too slow in winter. I peel and boil fifteen good-sized potatoes; mash through the colander, with a very little water; add one teacupful of flour, one heaping tablespoonful of sugar, the same of salt, and add two yeast cakes, after being dissolved with a little water. In two days the preparation is ready for use, one-third being sufficient for four large or six small loaves. The remainder will keep good until wanted for use. I make bread without setting any other sponge, adding a little soda.

Yeast (Potato).—It is claimed that aside from the advantage of healthfulness, bread well made from potato yeast will soon win converts to itself because of its superior lightness and delicacy of flavor. An excellent recipe for yeast is the following: Boil for about fifteen minutes in a quart of water a handful of common hops or a square inch of pressed hops tied in a piece of muslin; peel and grate five large or three very large potatoes; dissolve in the boiling water one cup of sugar and one-half cup of salt; add a pinch of ginger; remove the hops, add the grated potatoes; stir the mixture till it thickens, remove from the stove, and when milk-warm add one cup of good yeast; or, if this cannot be obtained, a small yeast cake, dissolved in a cup of water with flour stirred in to make a thin batter and allowed to rise till very light, may be used for the first brewing of potato yeast. It should be covered very tight, and set to rise in a warm place. After fermentation ceases, it should be kept in a cool place, in a covered jar of stone, or earthenware.

Many people boil and mash the potatoes instead of grating them; but the yeast sours sooner, and sour yeast will not make good bread, even with the addition of soda to correct the acidity. The hops can be omitted if desired, but they, as well as the salt and ginger, help to preserve the yeast, and a small quantity imparts no unpleasant flavor to the bread. White sugar keeps better than brown. A porcelain lined kettle or a bright tin vessel should be used in making yeast, as iron burns it dark. Care should be taken not to allow the yeast to become warmer than new milk, while rising, as scalding destroys its life.

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